NOVEMBER 12, 1951 NEWS ISSUE

Electrical World

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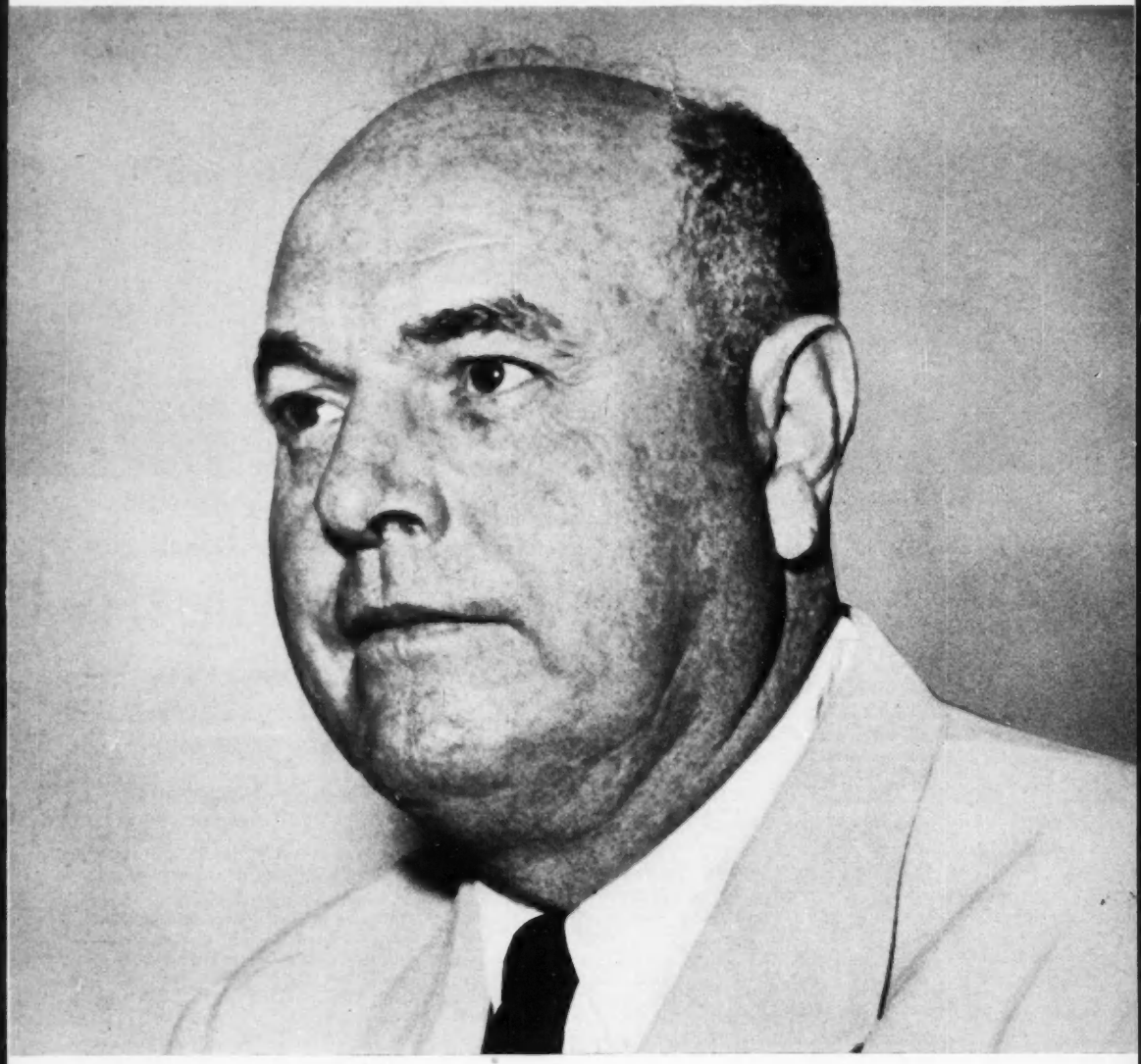

J. C. Darby, New President of NARUC

S. S. Detroit Edison, Out of Toledo ..... Page 16

It All Adds Up to More Load ..... Page 30

Informal meeting of Editor Blake and author R. H. Kaufmann finds them discussing best way to illustrate new article for DISTRIBUTION, "Overvoltage in Industrial Power Systems."

Wrapping up material for each issue is job of Miss Hamilton, helped out by editorial board member A. P. Ries. Many utilities and universities request file copies of DISTRIBUTION.

Will it help the distribution engineer?

Material for G.E.'s "Distribution" magazine must pass an acid test. Editorial board of 11 men and a girl keeps it preferred reading for electric utility men.

"Packed with useful information" . . . "articles get to the heart of distribution problems" . . . "suggestions have helped our system planning"—these are the kind of comments constantly being received from utility men about G.E.'s Distribution magazine.

Key figures in its continuing success are the 11 men in the photograph above. Under the guidance of Editor D. K. Blake (at head of table), this editorial board is responsible for the planning, evaluation and selection of all the material that goes into "Distribution." Representing many General Electric product divisions and engineering services, these men are in daily contact with developments, trends and problems of interest to the distribution engineer. The young lady performs the dual function of secretary for the editorial board and production editor in readying the magazine for printing.

As "Distribution" enters its 14th year of publication, the board is hard at work to make the magazine better than ever. But the acid test for every feature remains: "Will it help the distribution engineer?"

If you are not already receiving "Distribution," and would like to, simply write Editor, Distribution Magazine, General Electric Company, Schenectady 5, N. Y.

MORE POWER TO AMERICA

GENERAL ELECTRIC

XH-176

The Electrical Week

INDUSTRY MOBILIZATION (Page 14)—EW presents a new directory of officials of NPA's Electrical Equipment Division . . . Elimination of DO-rated orders is under consideration . . . Anaconda Copper Mining Co is planning to build an aluminum plant at Kalispell, Mont. . . . Industry M orders listed.

WASHINGTON—Defense Mobilizer Wilson urges quick approval of Cowlitz and Pelton projects in Pacific Northwest (p 5) . . . Interior puts Palisades project on a push-up schedule (p 6) . . . India will get assistance from U. S. Bureau of Reclamation (p 19).

ELSEWHERE—Bonneville Power Administration signs five-year contract giving five private utilities in Northwest up to 500,000 kw (p 4) . . . Clifford B. McManus urges salesmen at SEE conference to make friends for their utilities (p 11) . . . Hint of problems to face industry in '52 given in schedules of EEI committees (p 12) . . . Appliance sales are out of the doldrums, and industrial production is holding level (p 30).

• • •

Latest from Washington—REA co-ops appear to be having an easier time acquiring materials under present controls than under the World War II program . . . Because of steel plate scarcity, it's a good idea to order boilers at the same time you order turbines. Also utilties should approve manufacturers' drawings of boilers, turbines, and condensers as promptly as possible so that preliminary work can be started . . . Bureau of Mines has traced the Oct. 15 coal mine disaster which killed ten men to open-type electrical equipment which set off a gas explosion . . . REA has approved $3.4-million loan to Central Kansas Electrical Cooperative of Great Bend to add two 2,750-kw diesel units and 79 miles of transmission lines.

More Washington—Defense Mobilizer Wilson thanks electrical industry for cooperation in steel scrap drive. Now he wants help in copper scrap drive . . . Defense Production Administrator Fleischmann admits CMP is not working as well as planned.

Latest from the West—California Oregon Power is assembling substation, using rack for mounting three 100-kw distribution transformers on a single pole and a shunt capacitor switching setup which saves about 50% over commercial equipment . . . Minnesota State Federation of Labor has voted to strike from its constitution clause favoring municipal ownership of gas and electric utility systems.

Latest on Financing—Oklahoma G&E asks State Corporation Commission approval to exchange 42,765 shares of its common stock at $10 par for 750 shares of common of Baker Utilities, Bethany . . . Long Island Lighting arranges for sale of $10 millions of 5.25% preferred stock with W. C. Langley & Co group at $98.13 a share. Underwriters will reoffer at $100 . . . Consumers Power stockholders and employees subscribed to 532,673 shares (94.9%) of the 561,517 share offering of common on a 1-for-10 basis at $32 a share. Balance of 28,844 shares taken by Lehman Bros group, underwriters.

Latest on Electric Rates—South Carolina PSC orders Heath Springs L&P to cut rates by about 40% to City of Heath, principally for water pumping . . . Hearing of order in which North Carolina PUC has asked Tide Water Power to show cause why its rates should not be cut has been changed from Nov. 13 to Dec. 28.

After 15 years of development and field testing, first commercial shipment of a new packaged heat pump-air conditioning unit is made by General Electric's plant in Bloomfield, N. J.

Although it won't sign contract with Guy Myers, Whatcom County PUD, Bellingham, Wash., will join six other PUD's in offer to buy Puget Sound P&L properties.

Utilities had a record 38,190,484 tons of coal on hand Oct. 1, or 133 days' supply on September use.

First contracts on Oregon's $350-million The Dalles Dam on Columbia River will be awarded in March or April of next year, Col. T. H. Lipscomb, Portland District Army Engineer, says.

Congratulations—West Penn Power elects Harry Restofski a vice president and promotes Carl M. Skooglund to chief electrical engineer succeeding H. P. Langstaff, retired . . . Russell W. Aul, secretary and assistant treasurer for Jersey Central P&L, is named director of safety succeeding Malcolm S. Dickenson, resigned . . . Richard E. Pierce, vice president of Berkshire Gas, succeeds Chandler W. Jones as principal officer of Northampton Electric Lighting, Northern and Southern Berkshire companies of New England Electric System . . . Minneapolis-Honeywell Regulator elects Gerry E. Morse vice president in charge of industrial relations . . . New England Electric System appoints Edward F. Ziegler assistant vice president for labor relations . . . Coffing Hoist elects J. R. Coffing as vice president in charge of sales.

MONTANA'S NEWEST LAKE has begun to form behind Hungry Horse Dam on the South Fork of the Flathead River. The dam has already grown to 425 of its ultimate 564 ft. Power from two 71,250-kw units will be available next winter, USBR says

BPA Pact Allots Up to 500,000 Kw to 5 Private Utilities in Northwest

Major privately owned utilities in the Pacific Northwest will get up to half a million kw of low-price federal power a year under a five-year contract recently approved by Interior Department.

The contract, signed by Bonneville Power Administration acting for Interior and five major utilities in the area, provides a firmer basis for future planning than the utilities have had previously. In the past, all utilities, except Montana Power Co, have contracted for Bonneville power on a year-to-year basis.

Major accomplishment of the new contract, from the standpoint of private utilities, is they are given a definite niche in the priority ladder for federally produced power. The contract promises them BPA will deliver up to 500,000 kw of electricity before making any further firm commitments to industrial customers.

For the present, rates will remain at $17.50 per killowatt year, but provision is made for increases.

Companies involved are Portland General Electric, Pacific Power & Light, Puget Sound Power & Light, Washington Water Power, and Mountain States Power.

As the Bonneville Act requires, public bodies and cooperatives will get first call on all the power marketed by BPA. Next block of available power will go to industrial customers who already have firm commitments from the agency.

Private utilities come next down the priority ladder. All power in excess of the public body requirements and industrial commitments up to half a million kw will go to the five utilities.

Next block of BPA power—70,000 kw—will go to firm up interruptible power for the smaller industries, other than aluminum producers.

After that, privately owned utilities will have another call on the BPA-marketed power, if there is any. This block of power will be equal to the sum of all firm industrial loads of 2,500 kw or more which have in the interval been added on the systems of both preference customers and the private utilities. These loads are considered to be an addition to the normal load growth of the systems.

Further provision is made for power distribution to the private utilities, but the terms of the present contracts will probably expire before sufficient power is produced at BPA projects to make this possible. It is estimated that it will be the end of 1954 before the five utilities will be receiving their full share of the 500,000 kw on which they have a priority standing.

Power to the private utilities will continue to be supplied during part of each year on an interruptible basis, until it can be "firmed" with power from McNary and other federal dams now under construction. The contracts provide for successive extensions of one year, request to be made three years in advance.

Paul B. McKee, president of Pacific P&L, called the new contracts "a great step forward in the development of fair and business-like working arrangements between the government and electric companies of the region which have the responsibility of serving 700,000 customers."

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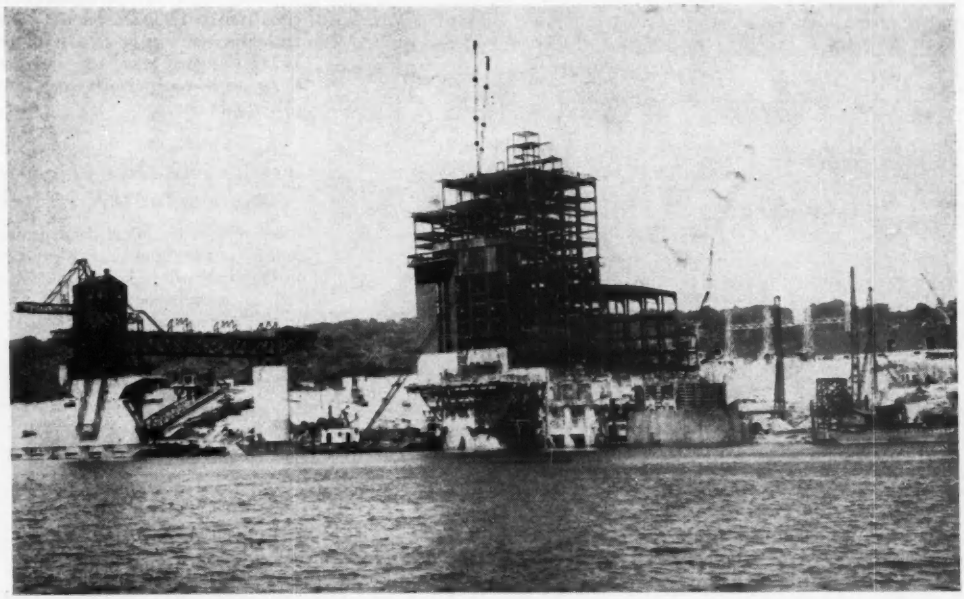
PSC Chairman Resigns

Owen Clarke, chairman of the Washington Public Service Commission, has resigned. Commissioner Jerome K. Kuykendall succeeds Clarke as chairman.



WALTER C. BECKJORD STATION is new name for 325,000-kw plant Cincinnati Gas & Electric Co is building on the Ohio River near New Richmond (EW, July 16, p 95). Formerly called Clermont Plant, it was renamed to honor company's president

Wilson Urges Approval of 2 NW Hydro Projects

Defense Mobilizer Charles E. Wilson last week put his stamp of approval on two Pacific Northwest hydroelectric projects, urging speedy approval by the Federal Power Commission.

Wilson also reiterated his support of a bill which would authorize federal construction of eight fuel-fired electric generating plants in the area, but did not give an outright promise that materials would be available for their construction.

Projects receiving Wilson's approval were City of Tacoma's 225,000-kw plant on the Cowlitz River and Portland General Electric Co's 108,000-kw Pelton Plant on the Deschutes. License applications for both projects are still under FPC consideration.

The action came after the top mobilizer conferred with Republican Sen Harry P. Cain of Washington and Frank Ward, superintendent of Tacoma City Light. Wilson sees the projects as one means of strengthening the power supply in the Pacific Northwest to meet defense production needs. He called on the FPC to grant licenses for them.

But on the fuel plants, which Bonneville Power Administration proposes to build, his plea was less urgent. He said it might be well to have Congressional authorization for the proposed plants so they could be built if materials were available. Requests for funds for construction could wait until the power picture in the area is clearer, he said.

The federal commissioners recently heard oral arguments on the application for the Cowlitz project license. Main opposition came from fishing interests. A spokesman for the Washington State Sportmen's Council told reporters during the course of the hearing that his organization would appeal the decision of FPC to the courts if it grants a license for the project. A recommended decision, presented by an FPC examiner, found that valuable fish runs might be destroyed by the proposed project, and said a license should not be granted.

This same examiner has recommended granting a license for the Pelton project, although fishing interests have also fought this project.

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Italian Output Increasing

Production of electric power in Italy for 1951 is expected to reach 28 billion kwhr, an increase of about 3 billion kwhr over output for 1950.

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CHINESE REDS in quilted winter uniforms picked up some Western know-how as United Nations linemen strung electric wires to supply the armistice-talk circus tent at Panmunjom, Korea. Wood flooring (center) was installed in tent to keep out cold

Columbia Reveals Plans for Engineering Center

Columbia University last week announced plans for a $22,150,000 Engineering Center which will combine teaching, research, and practice in engineering and the fundamental sciences on both undergraduate and graduate levels.

The center, a 14-story building at Riverside Drive and 125th St., New York, will house the Engineering School, the proposed Institute of Advanced Engineering Science, and a Division of Cooperative Research in Engineering which will work with industry in problems having educational value. It is expected to be completed by 1954.

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To Add 135,000-Kw Units

West Penn Power Co plans to install a 135,000-kw steam turbo-generator at its Springdale, Pa., station. The new generator will be the eighth unit at Springdale and cost of the addition is estimated at $18 million. It is expected to be ready for operation in October, 1953. A similar unit will be installed by Monongahela Power Co at the Albright station in West Virginia. Monongahela and Potomac Edison Co are now constructing the Albright station, in which each will install a 75,000-kw unit. All three utilities are subsidiaries of West Penn Electric Co.

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PEA Group Considers Spreader Stoker Use

Spreader stokers are steadily entering the utility power plant field now that equipment for 300,000 lb per hour boilers is being installed and units for 500,000 lb boilers are being discussed.

This was established in a symposium conducted by the Pennsylvania Electric Association's Prime Movers Committee at Johnstown Nov. 1-2. Contributors to the discussion included J. S. Bennett, American Engineering Co; Earl C. Miller, Riley Stoker Corp; J. L. Bainbridge, Detroit Stoker Co; and C. E. Miller, Combustion Engineering-Superheater, Inc.

It was asserted that the reasons for the trend were largely the ability to burn a wide range of coals efficiently at high burning rates and with quick response to load changes. Even lignite is being handled successfully. Stokers take no more power for low calorific value fuel, and auxiliary power requirements as a whole are relatively low. Typical maintenance costs run to 1¢ a ton burned. The consensus was that up to 150,000 or 175,000 lb per hour, the spreader stoker merits consideration along with pulverized firing.

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Interior Will Issue Bid Notices for NW Project

Bid notices for initial construction on the Palisades Dam and power plant on the Snake River in eastern Idaho will be issued this month by the Interior Department.

With money appropriated by Congress in October, the department is urging an all-out effort to get the Palisades project in full construction status as soon as possible. The project will have a generating capacity of 114,000 kw and cost $76.6 million.

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August Energy Sales Rise 12.4% Over Last Year

Electrical energy sales during August were 12.4% higher than those for the same month a year ago.

Electric utilities sold 26,725,250,000 kwhr to ultimate customers in August of this year compared with 23,777,151,000 kwhr in August, 1950. Revenue from ultimate customers totaled $469,300,000, or 11.4% more than the $421,089,900 received in August of last year.

Average usage per residential or domestic customer reached 1,943 kwhr in the 12 months ended Aug. 31, 1951, an increase of 9.2% over the 1,780 kwhr for the year before.

The average annual bill amounted to $54.99, up 6.2% for the 12 months ended Aug. 31, 1950. Revenue per kilowatthour declined 2.7% from 2.91¢ to 2.83¢.

Classification of Sales, August

Kilowatthour Sales August	Million Kwhr 1951	1950	Per Cent Change
Residential or domestic	5,810	4,991	+16.4
Rural (distinct rural rates)	1,030	874	+17.8
Commercial or industrial			
Small light and power	5,012	4,367	+14.8
Large light and power	13,493	12,236	+10.3
Street and highway lighting	245	219	+11.9
Other public authorities	669	589	+13.4
Railways and railroads			
Street and interurban railways	253	265	− 4.6
Electrified steam railroads	174	191	− 8.9
Interdepartmental	40	46	−11.1
Total to ultimate customers	26,725	23,777	+12.4

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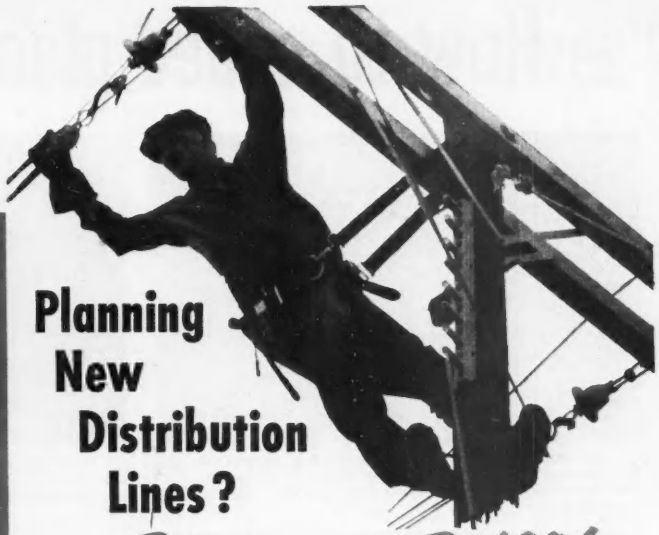
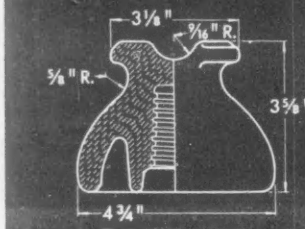


Planning New Distribution Lines?

Put it up to PINCO!

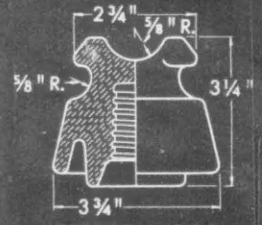
Putting up a Distribution Line is no problem when you "Put it up to Pinco" . . . because Pinco has everything you need—Insulators . . . Line Hardware . . . Guy Strains. Pinco makes them all, and they're all "tops" in performance as thousands of miles of such lines can prove. Engineered and built to distribution line requirements, Pinco products are not only RIGHT *for* the Job but RIGHT *on* the Job . . . for You!

Refer to Pinco Catalog No. 49 for complete electrical and mechanical characteristics.



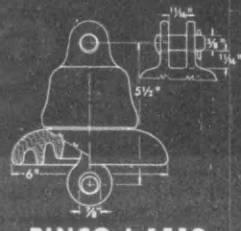
PINCO L 63

Dry Flashover . . . . . 65,000 volts
Wet Flashover . . . . . 40,000 volts
Leakage Distance . . . . . 7¼"
Mechanical Cantilever Strength 2500 lbs.



PINCO L 223

Dry Flashover . . . . . 50,000 volts
Wet Flashover . . . . . 30,000 volts
Leakage Distance . . . . . 6"
Mechanical Cantilever Strength 2500 lbs.



PINCO L 1510

Dry Flashover . . . . . 60,000 volts
Wet Flashover . . . . . 30,000 volts
Leakage Distance . . . . . 7"
M & E Strength . . . . . 10,000 lbs.

No. L63
Pinco Pin Type

No. L223
Pinco Pin Type

No. L1510
Pinco Suspension Type

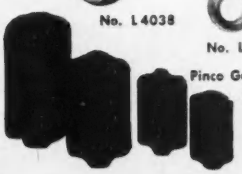
Pinco Strain or Dead-End Clamps

No. L4038

No. L1921

No. L4550

Pinco Guy Strains
Nos. L289
L506
L504
L502



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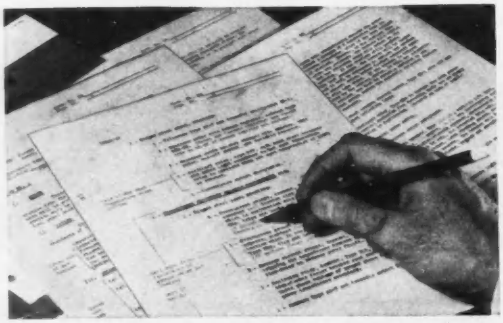
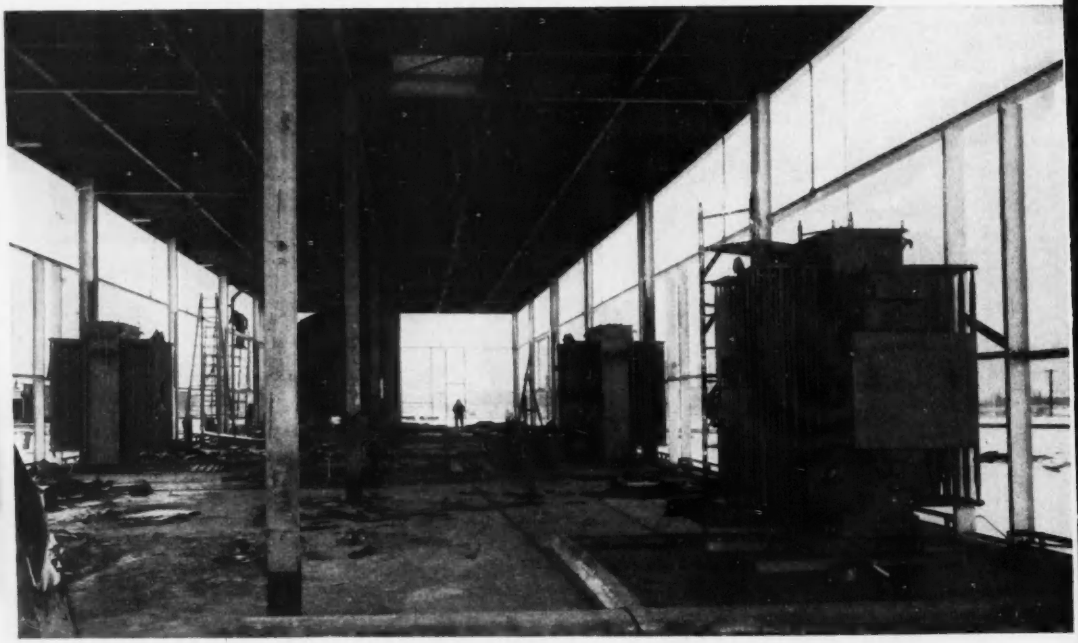
How to speed plant expansion



1. STANDARD "SPECS" SIMPLIFY PLANNING, PURCHASING. No need to spend weeks, months over drafting board and specifications for "piece-meal" electric system, when you order standard G-E power equipment.

2. YOU GET EASILY-ASSEMBLED UNITS. Instead of getting many individual items to install piece-by-piece, you get a few completely co-ordinated, easy-to-assemble units.

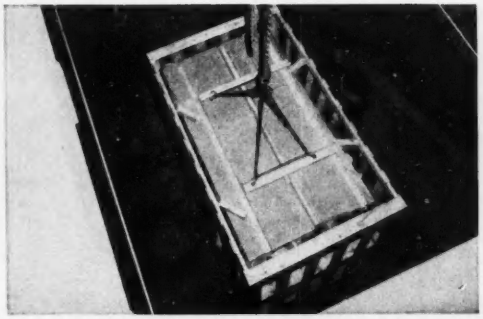


ONE OF WORLD'S BIGGEST MANUFACTURERS expands quickly with G-E power units, as shown above. Note that your power system can be installed before completing construction, giving you ample power to speed the rest of the job.

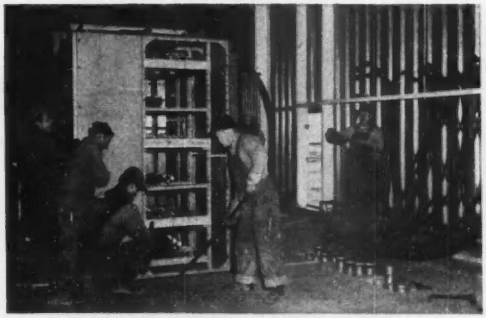
"Electric Power for Industry's Third and Biggest Expansion"

For assistance in modernizing or expanding your electrical system to meet today's greater production, send for this new 24-page booklet. Ask for Bulletin GEA-5600.

with Flexible G-E "Packaged Power"



3. EASILY HOISTED OR PUSHED TO CONVENIENT LOCATION. Part of flexibility is ease of movement as well as adaptability. In photo above, complete metal-clad switchgear unit is hoisted to roof.



4. EASY INSTALLATION CONSERVES SKILLED MANPOWER. G-E metal-enclosed switchgear units contain all needed components—all co-ordinated. Just place units in position, make circuit connections.

No matter how much more production you need now, or will need in the future, here are four good reasons for investigating General Electric's "packaged" switchgear and unit equipment today:

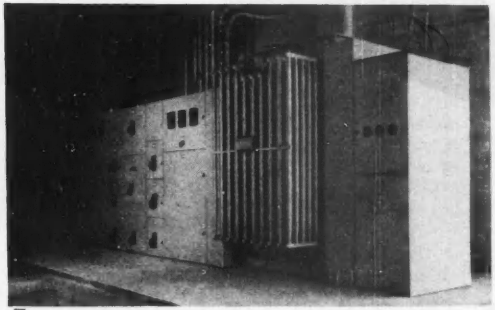
SAVES TIME. Order standard G-E switchgear and load-center unit substations for your entire system early—install the pre-assembled units quickly. No waiting for "missing links." Easy planning, easy installation and operation. Releases valuable time of key men for other important duties.

REDUCES COST. Cuts costs at nearly every step, from purchasing to maintenance. In many cases, load-center distribution requires 50% to 80% less copper than old-type low-voltage distribution. Flexible; eliminates expensive "hand-made" systems.

AVOIDS TROUBLE. G-E "packaged" switchgear and unit substations arrive at your plant ready for use. All components are completely co-ordinated and metal-enclosed. Helps prevent shut-downs due to power failure, provides greater personnel safety.

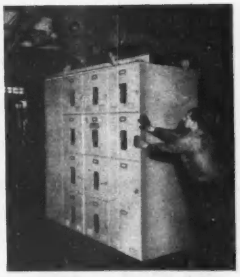
SAVES SPACE. No more need to clutter precious plant space with sprawling, dangerous open switchgear and wiring. G-E "packaged" units are compact, enclosed, can be put in convenient locations: near machines, in "unused corners," even on the roof.

Get your vital electric power equipment in packages. Install the units like machine tools. For more information, call your local G-E Apparatus Sales Office—or write to *General Electric Co., Schenectady 5, N. Y.*



5. DEPENDABLE SYSTEM IN FRACTION OF USUAL TIME. Besides quick installation with compact load-center unit substations like the one above, you get maximum protection against power failure. New units easy to add if loads grow.

6. EASY TO MAINTAIN. Interlocks, metal-enclosed live parts protect personnel at all times. Above, air circuit breaker draws out like file drawer for inspection.



7. EASY TO RE-LOCATE. When power loads shift, simply disconnect cables and move whole unit. Metal enclosure means protection in any location.

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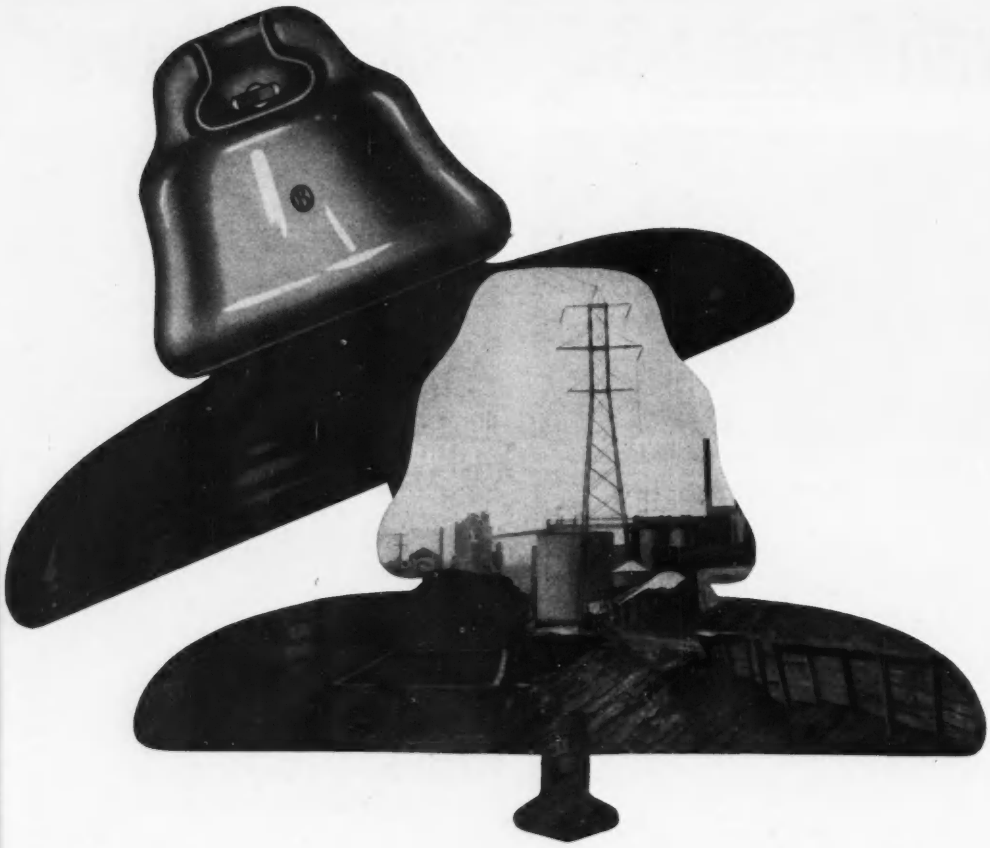
854-39



32 YEARS OF FACTS Favor O-B

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On this line, O-B suspension insulators have entered their thirty-second year--exceeding the expectations and fulfilling the "hopes" of their owners.

It is significant that the two systems this line connects are consistent O-B users. These companies need look no further than their own internal records for the soundest reason for this choice.

When suspension insulator purchases are made on the basis of solid *facts,* these facts favor O-B. What better basis can there be for making O-B your CHOICE OF INSULATORS?

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SEE SALES CONFERENCE speakers included Fischer S. Black, editor of Electrical World; Dr Adam S. Bennion, vice president of Utah Power & Light Co; and C. C. Walther, Walther Bros, New Orleans. Streuby L. Drumm, right, vice president, New Orleans Public Service, Inc, was chairman of conference, which was held in New Orleans

McManus Urges SEE Sales Group to Make Friends for Their Utilities

There never was a time when friends were as valuable to the utility business as right now, C. B. McManus, president of the Southern Co, told the general sales conference of the Southeastern Electric Exchange held in New Orleans Oct. 31-Nov. 2.

McManus, also president of SEE, said friendship between the industry and the people it serves is one of the most important things today. Management needs the guidance, advice, and counsel of its salesmen in making friends of its customers, he added.

"Unless the industry gets busy in Washington, it will go down," Frank W. Wilkes, president of Southwestern Gas & Electric Co, predicted.

He urged strong cooperation with and membership in utility organizations such as Electric Companies Advertising Program, Public Information Program, and others. He said that without such organizations, the utility business would have been through long ago.

Fischer S. Black, editor of Electrical World, predicted that kwhr sales would show an increase of 45% between 1950 and 1955, with the biggest gains coming in 1951, '52, and '53. He said that overall load factors would increase from 58.4% in 1950 to 60% at the peak of the mobilization effort and then level off at about 59% after that. The combined requirements of the electrical industry and the military will, by the second quarter of 1952, take 23.2% of the steel, 55.4% of the copper, and 52.1% of the total aluminum supply, he added.

Selective selling, better sales training, more effective advertising, and better public relations, are some of the fundamentals to be included in the industry's blue print for the job ahead, according to C. A. Tatum, Dallas Power & Light Co. While the industry should not lose sight of long-range goals, he said, the important thing is to make short-range sales and advertising plans to take care of the situation just ahead, and be ready to improvise or abandon them at a moment's notice.

Further rate increases are inescapable, said E. C. Vennard, Middle West Utilities Co. He said tail-end rates now in effect in most companies are below cost. He urged that utilities engage in more economic studies to make sure they get increased net on sales.

According to T. J. Newcomb, Westinghouse Electric Corp, most utilities have forgotten how to sell electrical appliances in a free market. The long-range outlook for major appliances is brilliant, he added.

Engineers could perform better if trained technicians were working with them to relieve them of routine, time-consuming jobs, according to Dr. Lee H. Johnson, Jr, dean of the College of Engineering, Tulane University. He said there were only 19 accredited technical institutes now training technicians. This, he said, has been of great concern to many engineers in education.

Some appliance retailers still oppose utility programs, but because of an intelligently planned program of cooperation between utility and distributor, have learned to cooperate to their own profit, according to C. C. Walther, Walther Bros, New Orleans. He said the biggest need in introduction of new products is sales training at all levels. The wise utility should be eager to engage in a thorough sales training program for wholesale and retail salesmen, he added.

"We have something to sell. It needs to be sold. You are among the men who must make the sale." These were the words of Dr Adam S. Bennion, vice president of Utah Power & Light Co. He said that America's No. 1 sales job is to sell the people a new appreciation of and a new devotion to their American heritage.

(Additional coverage of the conference will be included in the "Sales and Service" section of a forthcoming issue.)

•

Wood-Waste Inadequate

The Washington State Institute of Forest Products has virtually exploded the possibility that wood-waste could be used economically as fuel for steam plants to generate electric power. Even if all the sawdust and wood-waste in the state were collected in one place, the supply would be insufficient to run a steam plant, of 300,000-kw capacity for more than two months, the institute reported. Furthermore, it pointed out, such collection would be economically impossible.

What Will Industry's Problems Be in '52?

Part I of a Two-Part Article

H. P. SEELYE

J. H. FOOTE

H. M. HILL

F. A. REDDING

G. V. WILLIAMSON

ONE good way to forecast the problems the electrical industry will have to face in 1952 is to take a look at what items are up for consideration during the coming year before the various committees of Edison Electric Institute. Electrical World has taken that look, and in this article presents a survey of the committees and their future plans. About half are covered on these pages; the remainder will be presented in a forthcoming issue.

Engineering Committees

Engineering Division General . . . Coordinates the work of the five committees of the engineering division and deals with engineering matters of a more general nature than are handled by these committees. Headed by Howard P. Seelye, Detroit Edison Co, this group in the coming year will continue its study of air pollution and codes and standards.

Electrical Equipment . . . Is concerned chiefly with problems of bulk power supply, design of major installations, and station operating troubles. It will hold a winter meeting to discuss these problems in Cincinnati Feb. 18 and 19, and a spring meeting in Chicago next May. The committee is headed by J. H. Foote, Commonwealth Services, Inc.

Hydraulic Power . . . Under the chairmanship of Hibbert M. Hill, Northern States Power Co, devotes itself to hydroelectric plants, their design, operation, and maintenance. Two subcommittees will be active during the coming year, considering artificial precipitation, and cavitation and pitting.

Meter and Service . . . Operates jointly with the Service Methods Committee of the Association of Edison Illuminating Companies. One of its prime considerations will be the problem of possible restriction in watthour meter production.

J. A. PULSFORD

W. F. BROWN

D. C. LUCE

W. L. CISLER

F. E. VERDIN

F. A. Redding, Southern California Edison Co, is chairman of this committee.

Prime Movers . . . Conducts round table discussions and issues reports primarily on design and operation of thermal plants. Under G. V. Williamson, Union Electric Co of Missouri, meetings this year will be held in cities that permit visits to significant new installations.

Transmission and Distribution . . . The committee, headed by J. A. Pulsford, Public Service Electric & Gas Co, feels rapid load growth, the engineering manpower shortage, and engineering problems arising from equipment shortages are major problems to be met by T&D engineers this year. These subjects will take precedence at the winter meeting in St. Louis Feb. 14-15, 1952, and the spring meeting in Chicago, May 6-7, 1952.

General Committees

Accident Prevention . . . As it does each year, the committee, headed by W. F. Brown, Consolidated Edison Co of New York, will compile and analyze fatalities during the year. Its Safety Training Subcommittee is preparing new safety manuals, "The Use and Care of Hot Line Tools" and "New Purchase Specifications for Linemen's Climbers, Belts, and Safety Straps."

Codes and Standards . . . Provides guidance on industry policy concerning technical regulations to representatives dealing with other associations and rule-making bodies. Chairman of the group is D. C. Luce, Public Service Electric & Gas Co.

Electric Power Survey . . . As in past years, the group, under the direction of Walker L. Cisler, Detroit Edison Co, will make semiannual reports on (1) The nation's peak loads, capabilities, reserve margins and energy requirements, and (2) scheduled production of heavy electric power equipment.

EEI Committee Schedules Provide a Hint

I. M. CARPENTER

Industrial Relations . . . The committee, under F. E. Verdin, Cleveland Electric Illuminating Co, plans to make studies of the following topics during the year ahead: Personnel administration, organization planning and administration, management and executive development, and closer liaison with educational institutions.

R. M. BESSE

Insurance . . . Will continue its study of major problems in the field, such as war damage insurance, proposed rate increases for boiler and machinery insurance, and the higher court awards being made on third party actions. I. M. Carpenter, Ebasco Services, Inc, is chairman.

E. S. THOMPSON

Legal . . . Provides information on legal developments in the electric utility field. The group, headed by Ralph M. Besse, CEICo., will hold meetings during the winter and next May. A one-or-two-day seminar will be organized for claims men in the industry.

H. H. SCAFF

Membership . . . Examines applications for Institute membership and makes recommendations to EEI board of directors. Committee is headed by Earle S. Thompson, West Penn Electric Co.

G. E. WHITWELL

Financing and Investor Relations . . . Will provide the industry with comprehensive information on utility financing and maintenance of good investor relations. The committee, under Harold H. Scaff, Ebasco Services, intends to collect this data through research studies and group discussions.

Prize Awards . . . Conducts all EEI-sponsored prize contests with the exception of the Charles A. Coffin Award. Under George E. Whitwell, Philadelphia Electric Co, the committee will continue to screen new awards offered for institute sponsorship and appoint judges for the various contests.

Purchasing and Stores . . . Makes studies in the two general fields of its title. Purchasing section plans to consider contractual problems, conducting interviews, and an equitable measure of performance in purchasing. Stores section will look into unit costs in stores operations, the standard packaging program, and mechanical devices for handling materials. R. L. Leach, Georgia Power Co, is chairman of the committee.

R. L. LEACH

H. I. MILLER

J. F. GASKILL

E. H. SCOTT

S. G. PAGE

Rate Research . . . Is concerned chiefly with problems related to increasing costs of operation. The committee, under Harry I. Miller, Wisconsin Public Service Corp, plans to hold four meetings during the year to disseminate rate problem data collected through a study of recent rate cases.

Rural and Urban Development . . . Will draw up area development programs for electric operating companies during the next few months. The committee, whose chairman is J. Frank Gaskill, Philadelphia Electric Co, is considering sponsorship of a national conference on problems of area development.

Statistical . . . Provides information on the electric industry with emphasis on the problems of the day. Continued work is planned on the committee's proposed Index of Electric Power Output, now being sent on a private basis to members of the board. Similar to recognized general business indices, the index attempts to end erroneous conclusions obtained from year-to-year comparisons of output. The committee is headed by E. H. Scott, Detroit Edison.

Transportation . . . Will hold its annual spring conference of Utility Fleet Operators in Philadelphia next April in conjunction with the Motor Vehicle Committee of American Gas Association. The committee, with S. G. Page, Duquesne Light Co, as its chairman, will attempt this year to standardize records of operating statistics to permit comparisons between companies.

Electrical Equipment Division—National Production Authority

(Prepared by Electrical World, Nov. 5, 1951)

Office of the Director
Director—B. W. Clark (X3256)
Deputy Director—L. D. Shank (X3256)
Assistant to Director—H. E. Way (X5707)
Administrative Officer—Frank Pontenzo (X3093)

Outside Distribution Branch—Chief, D. A. Griffin (X3938)
Pole Line Equipment Section—Chief, Herbert C. Landsell (X4260)
Switchgear Section—Chief, R. N. McCollum (X4280)
Transformer Section—Chief, G. W. Cooper (X3939)

Motor and Control Branch—Chief, S. H. Keller (X3947)
Battery and Rectifier Section—Chief, E. D. Murray (X4452)
Motor and Generator Section—Chief, Roger Kingsland (X3095)

Program and Distribution Branch—Chief, C. G. Laslie (X5410)
CMP Acceptance Section—Chief, H. B. Findley (X3298)
Statistical Section—Chief, C. W. Mueller (X5707)

Lighting and Interior Distribution Branch—Chief, E. S. Milligan (X5657)
Exterior Lighting Equipment Section—Chief, Hugh Estes (X4138)
Industrial and Commercial Lighting Equipment Section—Chief, J. H. Brundage (X4138)
Residential Lighting Equipment Section—Chief, John Payne (X4129)
Wiring Device Section—Chief, L. A. Sharp (X4117)

Offices are on 2nd Floor of New General Accounting Office Building., 5th and H Sts, NW, Washington 25, D. C. Telephone extensions are on STerling 5200.

Elimination of DO-Rated Orders Is Under Consideration at Washington

The elimination of DO (Defense Order) ratings as they apply to the purchase of many items of electrical equipment is being considered by some mobilization planners. No immediate action is contemplated, but research is being carried on to try to determine the effects of eliminating ratings on all or most of the electrical equipment items.

If the change is made, the manufacturer, rather than the National Production Authority, would be responsible for distribution of the items he produces. Some planners talk specifically of eliminating the ratings brought about by self-certification of requirements. This would apply to the minor requirements of electric utilities.

Ratings might still be retained for equipment needed by the Defense Department and Atomic Energy Commission. But it is believed that manufacturers would naturally give priority to orders placed by these agencies.

Those who favor eliminating ratings argue it would save paper work for both purchaser and manufacturer. They argue further that manufacturers are in a better position to know the needs of their customers than a government agency.

These proponents now see the controls program faced with two alternatives: (1) Creation of a multiple-band rating system or (2) elimination of many ratings. They prefer the latter.

At present only Defense Department and AEC-sponsored orders are given top priority, which sets up a sort of priority band. All other rated orders must compete for a place in the manufacturers' order books on an open-market basis.

Elimination of ratings would not greatly affect the allocation of controlled materials, the proponents of the plan say. NPA claimant agencies would have about the same amount of work as now.

A few manufacturers have been sounded out on the proposals, but they have not expressed any strong preference. Before action is taken, manufacturers' advisory committees would be consulted.

Another question mark is the attitude of high level NPA officials. Unless they are convinced that the proposals would simplify or otherwise aid CMP, they would be reluctant to give them a try.

•

Anaconda Would Build Kalispell Aluminum Plant

Anaconda Copper Mining Co is willing to produce aluminum. If the government gives its consent, it will construct a $40-million plant at Kalispell, Mont. Production of the plant would be 108 million lb a year.

Cornelius F. Kelley, Anaconda chairman, said that Harvey Machine Co., Torrance, Calif., would be a "partner" in the operation and would hold "a small minority interest." Harvey has been trying unsuccessfully for some time to get a $46-million loan from the Reconstruction Finance Corporation to build the plant.

Anaconda's plans call for getting the necessary electric energy from the Hungry Horse Dam now under construction on the South Fork of the Flathead River. Anaconda's entry into the aluminum producing field will be welcome news for government officials who have been seeking another competitor for the "Big Three," Alcoa, Kaiser, and Reynolds.

•

Industry M Orders

Copies of the following M order and amendment may be secured from the National Production Authority, Washington 25, D. C., or any regional office of the Department of Commerce:

M-88 provides that any distributor of **aluminum wrought products** may place orders with an aluminum producer for replacement of stock sold during the preceding month to fill authorized controlled material (ACM) orders and orders under NPA directives.

Amendment to Dir 3 of M-1 permits **steel** producers to accept or reject (except in case of direct military or AEC) CMP orders up to 15 days prior to expiration of product lead times.

Here is L-M's complete line of type PHD
5 KV HEAVY DUTY CUTOUTS

8000 amperes interrupting capacity for 50 ampere cutout
14,000 amperes interrupting capacity for 100 ampere cutout
20,000 amperes interrupting capacity for 200 ampere cutout
1. standard duty door—1200 amperes interrupting capacity
2. heavy duty door—8000-5000 amperes interrupting capacity
3. switch blade door—100 amperes continuous current rating
4. standard duty door—3000 amperes interrupting capacity
5. heavy duty door—14,000-10,000 amperes interrupting capacity
6. switch blade door—200 amperes continuous current rating
7. heavy duty door—20,000-15,000 amperes interrupting capacity
8. switch blade door—400 amperes continuous current rating

Up to 20,000 amperes interrupting capacity

Interchangeable Doors—standard, heavy duty, and switch blade types—in each rating

50 and 100 ampere doors fit your present PVD® cutouts

Here is the first and only complete line of cutouts for high power capacity distribution feeders. These cutouts provide extra high interrupting capacity *as you need it*, without the extra cost for needless high *continuous* current rating. You can install one of these new L-M cutouts with standard duty door. As feeder load requirements change and fault currents increase, you can change it to a heavy duty cutout, in just six seconds, by hooking on the heavy duty door. Or change it to a disconnect switch—either stationary or indicating. Or you can change over your *present* PVD's! Warehousing and stocking are simplified, costs are cut.

PHD is a Line Material Co. trademark.

OUTSTANDING DESIGN FEATURES

- Housings wet-process porcelain, glazed inside and out.
- Hanger supports cemented into back of porcelain housings.
- All current carrying parts silver plated.
- New clamp type terminals with easily accessible large-head screws.
- Replaceable "bakelined" fuse cartridge tubes resist weathering and arcing.
- Spring-actuated flip-out device pulls fuse link down and out of tube, assuring instant separation of link parts, even with the smallest links, and low fault currents.

ENGINEERED FOR SAFETY—The lineman can remove the door completely, re-fuse and replace it, all with a switch stick. When door is open, all door parts are dead.

400 ampere disconnect switch in indicating position

Through the use of this new, higher-rated switch blade, the 200 ampere cutout can now be converted simply and quickly to a 400 ampere disconnecting switch for use on higher nominal current systems. Door can be closed with hinged blade in disconnect position below the box, giving positive indication that the line is open—a unique L-M feature.

L-M HEAVY DUTY CUTOUTS

RATING	DOORS AVAILABLE	INTERRUPTING CAPACITY rms amperes 2.5 kv*	5 kv**
50 AMPERES	1. Standard duty, indicating	1,200 amp.	1,200 amp.
	2. Heavy duty, non-disconnecting	8,000 amp.	5,000 amp.
	3. Switch blade	100 amperes continuous current rating.	
100 AMPERES	4. Standard duty, indicating	3,000 amp.	3,000 amp.
	5. Heavy duty, non-disconnecting	14,000 amp.	10,000 amp.
	6. Switch blade	200 amperes continuous current rating.	
200 AMPERES	7. Heavy duty, indicating	20,000 amp.	15,000 amp.
	8. Switch blade	400 amperes continuous current rating.	

* or line-to-neutral 4160 or 4330 volts Gr. Y. ** or line-to-neutral 8330 volts Gr. Y.

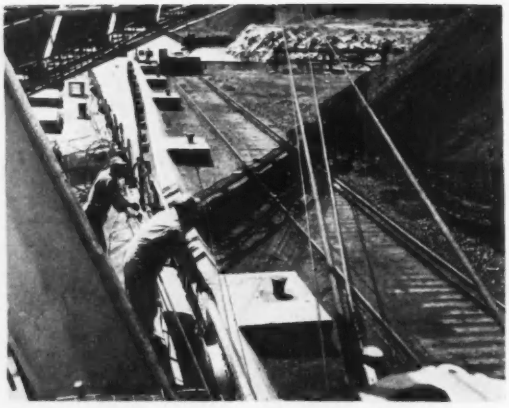
GET THE WHOLE STORY—Ask the L-M Field Engineer for complete information, and copy of Bulletin on PHD Cutouts; or write Line Material Company, Milwaukee 1, Wisconsin (a McGraw Electric Company Division).

55

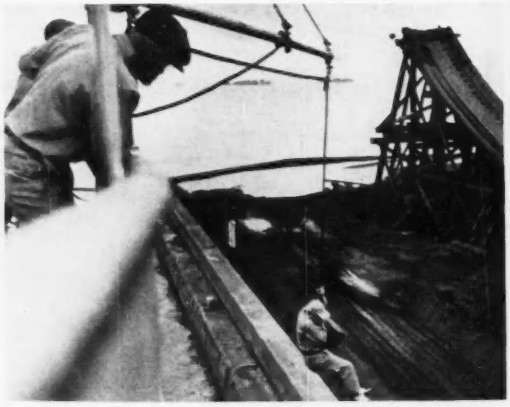
LINE MATERIAL ... fuse cutouts

Complete Coordinated Equipment for Distribution Today

COAL CARRIER unloads at Marysville Plant of Detroit Edison Co on the St. Clair River. Ship brought cargo 100 miles north from Toledo



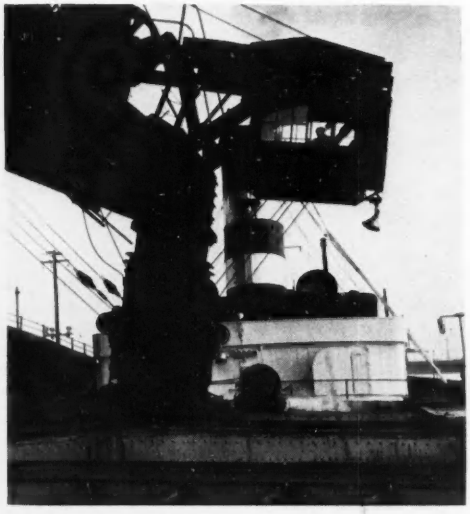
SHIP barely gets one line on the pier before unloading boom is swung outboard to begin adding to the huge pile beside the station



CREWMAN swings out on a landing boom as coal carrier edges into dock at Toledo. Loading at port is done around the clock

DETROIT RIVER is carrier's highway. As ship steams south to reload, crew cleans the deck and checks unloading gear

WHEELSMAN Cy Farrell, right, gives an able bodied seaman lesson in reading the gyro compass at the steamer's helm



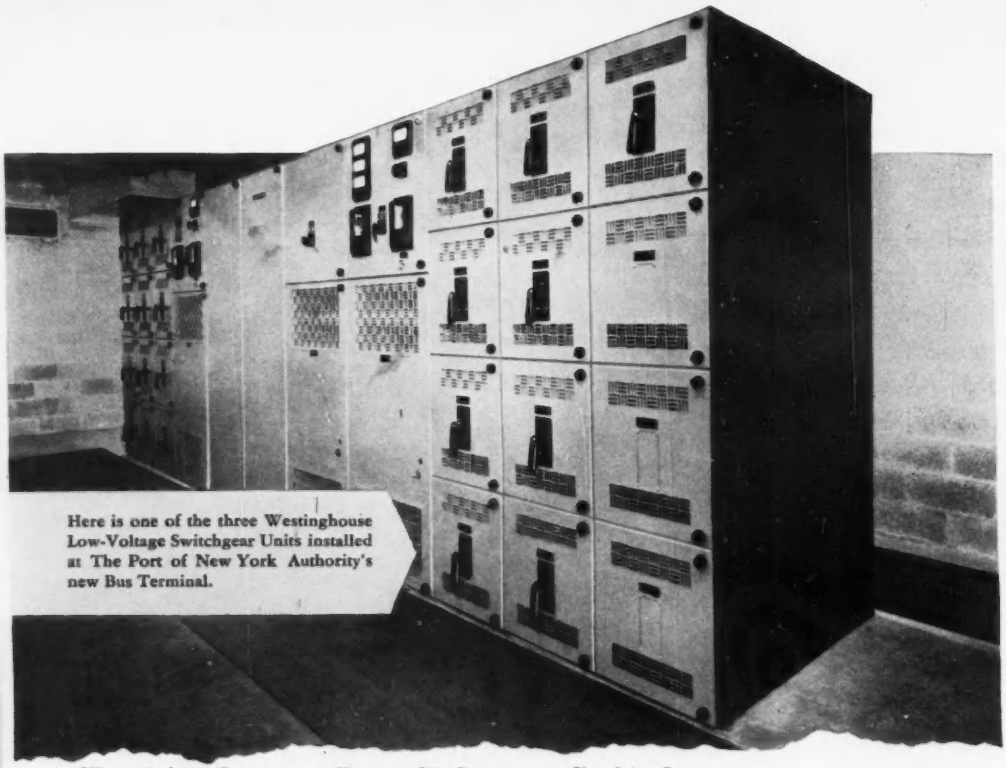
LOADER at Toledo lifts up coal cars and tips them into one of Detroit Edison's five holds. Operation takes three hours

S.S. Detroit Edison, Out of Toledo

Coal for Detroit Edison Co's four dockside plants often travels 100 miles over water on its way to produce kilowatts. Nearly 3,750,000 million tons annually are shipped out of Toledo and other Lake Erie ports directly to the black mountains beside the generating stations.

Two lines, Boland & Cornelius and Columbia Transportation, use lake steamers, like the *Detroit Edison* shown on these pages, and coal barges to keep the power plant boilers in fuel.

On a typical run, Capt. Frank Monroe of the *Edison* loads his ship at Toledo. In the three-hour process, 105 coal cars are lifted up and tipped into five holds. Then his crew casts off, and he sets course across Lake Erie for the Detroit River, 35 miles distant. The steamer passes the large manufacturing city, crosses Lake St. Clair, enters the St. Clair River, and finally docks at Marysville, below Port Huron. As soon as lines are ashore, the unloading boom is swung over and coal starts rumbling up from the hold. George Gellatly, Detroit Edison photographer, who took the pictures en route, was impressed by the ship's efficiency—and the chow.



Here is one of the three Westinghouse Low-Voltage Switchgear Units installed at The Port of New York Authority's new Bus Terminal.

Westinghouse Low-Voltage Switchgear serves modern, new Bus Terminal of The Port of New York Authority

In making this new Bus Terminal the most functional, most modern of its kind, The Port of New York Authority sought to achieve improvements in every phase of terminal operation. With so much depending on electrical power, the protection of vital electrical services was naturally a prime consideration. Note what this user has to say about Westinghouse Low-Voltage Switchgear which was selected for this key function.

"The installations have contributed to the maintenance of unusually good service continuity. Also, our operating personnel have particularly praised the electrical and mechanical interlocking features which assure maximum safety. Maintenance has been negligible."

For installations in central stations, industrial plants or large commercial buildings, Westinghouse Low-Voltage Switchgear offers you this same safe, low-cost means of protecting vital electrical services.

For complete information send for Booklet B-2296-D. Contact your Westinghouse representative, or write: Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Pa. J-60766

YOU CAN BE SURE... IF IT'S

Westinghouse

LOW-VOLTAGE SWITCHGEAR

MEETINGS

National Electrical Manufacturers Association
Chalfonte-Haddon Hall, Atlantic City, N. J., November 12-15.

California Municipal Utilities Association
Annual Conference, Hotel Leamington, Oakland, Calif., November 13-16.

American Society for Testing Materials
Insulating Oil Symposium, General Brock Hotel, Niagara Falls, Ontario, Can., November 14.

Wisconsin Utilities Association
Electric-Gas Sections, Sales-Engineering Divisions, Schroeder Hotel, Milwaukee, Wis., November 14-16.

Instrument Society of America
Boiler Instrumentation Symposium, Bellevue-Stratford Hotel, Philadelphia, Pa., November 15.

New Jersey Utilities Association
Annual Meeting, Seaview Country Club, Absecon, N. J., November 15-17.

American Society of Mechanical Engineers
Annual Meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., November 26-30.

Westinghouse Electric Corporation
4-H Farm-Home Electric Program Conference, Hotel Stevens, Chicago, Ill., November 28.

Pacific Coast Electrical Association
Annual Hawaiian Conference, Royal Hawaiian Hotel, Honolulu, T. H., November 29-30.

★**American Institute of Electrical Engineers**
Feedback Control Conference, Chalfonte-Haddon Hall, Atlantic City, N. J., December 6-7; Computer Conference, Benjamin Franklin Hotel, Philadelphia, Pa., December 10-12; Winter General Meeting, Hotel Statler, New York, N. Y., January 21-25, 1952.

Public Utilities Advertising Association
Region 2 Meeting, Advertising Club of New York, New York, N. Y., December 7.

Chicago Lighting Institute
Industrial Production-Safety Lighting Clinic, Chicago Lighting Institute Auditorium, Chicago, Ill., December 7.

★ Addition this week.

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Susitna Basin Projects Can Develop 300,000 Kw

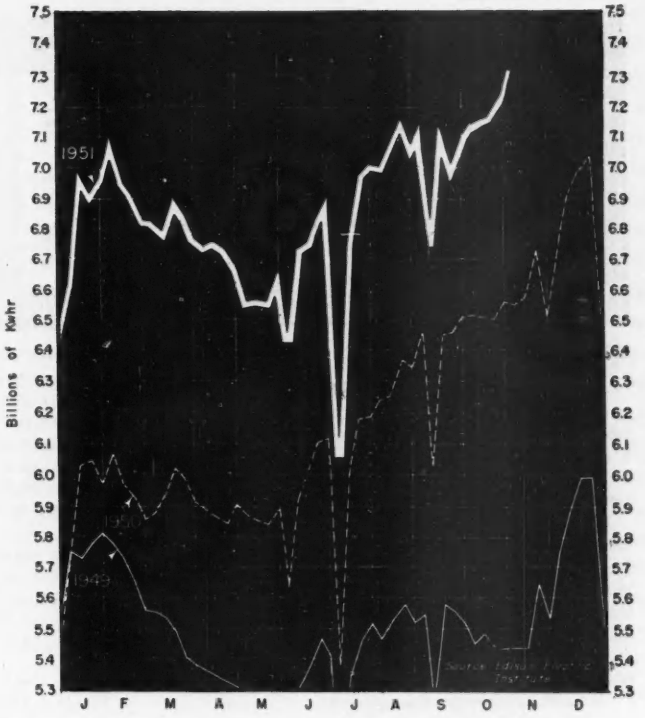
Surveys which will be completed this winter indicate that a minimum of 300,000 kw can be developed by hydroelectric projects in the Susitna Basin north of Anchorage, Alaska, according to reports made at Anchorage by Joseph M. Morgan, district manager for the Reclamation Bureau.

The 300,000-kw potential compares with the 30,000 kw now being consumed in the Anchorage area and the 30,000 kw expected from the Bureau's Eklutna Project, now under construction.

•

Outdoor Design Planned

Pacific Gas & Electric Co's tenth postwar steam plant, newly started on the San Joaquin River west of Pittsburg, Calif., will be of outdoor design. Present plans for the $80-million, 600,000-kw plant call for roofing over only the firing aisle, pumps, and control room.



Output Week Ended Nov. 3—7,319,019,000 Kwhr

Weekly Output, Millions Kwhr

1951		1950		1949	
Nov	3 7,319	Nov	4 6,551	Nov	5 5,435
Oct	27 7,234	Oct	28 6,563	Oct	29 5,433
Oct	20 7,149	Oct	21 6,503	Oct	22 5,430
Oct	13 7,160	Oct	14 6,509	Oct	15 5,481
Oct	6 7,156	Oct	7 6,514	Oct	8 5,450
Sept	29 7,102	Sept	30 6,503	Oct	1 5,521
Sept	22 7,014	Sept	23 6,457	Sept	24 5,556
Sept	15 7,138	Sept	16 6,449	Sept	17 5,579
Sept	8 6,795	Sept	9 6,029	Sept	10 5,258
Sept	1 7,146	Sept	2 6,459	Sept	3 5,544

Per Cent Change from Previous Year

	Nov 3	Oct 27	Oct 20
New England	+ 7.9	+ 4.4	+ 3.7
Mid-Atlantic	+10.5	+ 7.5	+ 7.5
Central Industrial	+ 7.6	+ 6.7	+ 6.6
West Central	+13.2	+11.7	+11.9
Southeast	+16.4	+14.0	+14.2
South Central	+17.3	+20.1	+18.7
Rocky Mountain	+11.0	+ 9.6	+10.8
Pacific Coast	+13.7	+13.1	+11.3
Total United States	+11.7	+10.2	+ 9.9

India to Get Assistance from Reclamation Bureau

India has made an agreement with the United States for technical assistance from the Bureau of Reclamation for which she will pay the full cost, estimated to be approximately $150,000 a year.

Part of the annual expenditure will go to five or six Reclamation engineers who will aid the central government's $2-billion multi-purpose river development program in India. But the bulk of the money will be spent for research, tests, and services at the bureau's engineering center in Denver.

Consummated under the same law that authorized the Technical Cooperation (Point 4) Administration in the Department of State, the Indian agreement is the first of its kind. It differs from Point 4 contracts in providing full payment by the foreign government for U. S. services.

•

Initiates Scholarship Plan

An $80,000 scholarship program, designed to help alleviate the critical shortage of industrial engineers, has been initiated by the Reliance Electric & Engineering Co, Cleveland, Ohio. The program provides for the admittance of eight qualified high school graduates annually to the School of Engineering of Fenn College in Cleveland.

YIELDS (%) — Operating Electric Utility Securities

Quality	Bonds			Preferred Stocks			Common Stocks		
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
DATE									
1951									
Nov. 1	2.98	3.04	3.14	4.18	4.39	4.73	5.46	6.23	7.01
Oct. 25	2.94	2.99	3.11	4.15	4.41	4.71	5.50	6.29	7.12
END OF QTR.									
3rd 1951	2.87	2.91	3.04	4.05	4.27	4.61	5.52	6.24	7.05
2nd 1951	3.02	3.11	3.23	4.11	4.37	4.68	5.73	6.38	7.78
1st 1951	2.87	2.93	3.00	3.96	4.19	4.52	5.47	6.20	7.13
4th 1950	2.65	2.67	2.78	3.86	4.14	4.51	5.80	6.54	7.44

Data, Reis & Chandler, Inc.

WWP Stock Distribution Plan Filed by American

If Washington Water Power Co stock sale cannot be arranged by Jan. 1, the stock will be distributed among the stockholders of its parent, American Power & Light Co.

Plan for this distribution has been filed with the Securities and Exchange Commission as directed by the commission. American is under order of the SEC to dispose of its WWP holdings as soon as possible. Howard Aller, president of American, proposes to sell the stock to a group of Washington State PUD's, and has been granted until Jan. 1 to file notification of proposed sale with SEC.

Plan for distribution contained two qualifications. First, it would not be effective if American had filed the notification of proposed sale by Jan. 1. Second, no formal hearings would be held on the plan prior to Jan. 1.

Following its approval and enforcement by a U. S. District Court, the plan contemplates distribution of one share of WWP stock for each share of American stock held by the stockholders. This will mean reclassification of the WWP stock, now numbering 2,541,800 shares, to make it conform to the 2,342,411 shares of American capital stock.

The plan also provides that American will transfer and assign to WWP, as a capital contribution, all of the 3,000 shares of outstanding capital stock ($100 par) of Washington Irrigation & Development Co and any and all claims which American has against that company. This includes $43,200 in promissory notes of WWP held by American.

One of American's largest stockholders, Electric Bond & Share Co, which holds 183,050 shares of American, also filed with SEC a plan for disposal of WWP stock in case it is distributed.

Under this plan, Bond & Share proposes "to distribute as a dividend to its stockholders that number of shares of WWP common stock, the market value of which at the time of the distribution to Bond & Share's stockholders will be approximately equal to Bond & Share's earnings for the six months' period within which the distribution is made."

Bond & Share assumes this distribution would be made during the first six months of 1952, and proposes to distribute any WWP stock in connection with its regular dividend payment date of late June, 1952.

Bond & Share proposes to sell, in such manner as the commission may permit, any remaining shares of Washington common stock which are not paid out as a dividend.

FINANCIAL BRIEFS

Georgia Public Service Commission will resume hearings Nov. 19 on Georgia Power Co's request for a $4.3-million annual electric rate hike . . . **California Oregon Power Co** has asked California Public Utilities Commission approval to raise electric rates by $105,828 a year and the Oregon commission for $291,422 a year hike.

Mountain States Power Co has received Idaho Public Utilities Commission approval to issue $7 million unsecured notes due Dec. 31, 1953.

Electric Utility Financing

Company	Description	Amount of Offering (000)	Offering Price	Yield or Price to Public
	WEEK OF NOVEMBER 1-7			
Bonds				
Rockland Light & Power	1st mtg, 3¼% 1981 new money	$ 6,000	102.738%	3.60%
Common Stock				
Consumers Power	561,517 sh (1-for-10, record Oct. 17 to expire Nov. 2)	$17,969	$32.00	6.25%
	WEEK OF NOVEMBER 8-14			
Bonds				
Florida Power & Light	1st mtg 1981	$10,000		
Detroit Edison	gen and ref bonds 1976	40,000		
Preferred Stock				
Commonwealth Edison	1,716,500 sh, $1.32 cum conv, $25 par (to common holders on ratio of 1 sh pfd for each 8 common sh held on Oct. 30 to expire Nov. 14)	$42,913	$31.00	4.26%
Common Stock				
Long Island Lighting	524,949 sh (1-for-7, record Oct. 24 to expire Nov. 8)	$ 6,824	$13.00	6.15%
	SCHEDULED NOVEMBER-DECEMBER			
Bonds				Bid Date
Gulf States Utilities	1st mtg 1981	$10,000		Nov. 19
Central Illinois Light	1st mtg 1981	8,000		Nov. 27
Long Island Lighting	1st mtg 1976	25,000		Nov. 28
Central Maine Power	1st and gen mtg 1981	7,000		Dec. 5
Virginia Electric & Power	1st mtg	20,000		Dec. 10
Preferred Stock				
Northern Indiana PS	240,000 sh, $25 par cum conv, into common sh-for-sh, preference stock (to common holders on 1-for-12½ sh basis, record Nov. 9 to expire Dec. 3)	$ 6,000	.....	.....
Common Stock				
Central Maine Power	315,146 sh (to be offered to 6% pfd holders on 5-for-1 basis and to common holders on 1-for-7 basis; New England PS, parent and holder of 49% of common, waiving its right to subscribe for new common; price to be determined by competitive bidding)	.....	.....	Dec. 5

IN THE INDUSTRY

KEN KOST

Next month is the industry's big month of the year. This is the month when the days are short, when the weather is often cold, when the pre-Christmas shopping rush is on, and when Christmas lighting and displays drive up the lighting load. This is the month when peak loads are highest and when most utilities will have capacity problems if they are to have them at all in 1951. So November is a good time to appraise the industry's capacity and its ability to meet the peak loads of December.

For all practicable purposes no one needs be concerned with power supply for the big month. Judging from the experience of past years and all available information, one can find no indication that the industry will be unable to meet the demands of its firm power customers. As has been the case recently, the power supply will be short in certain areas. But the companies or suppliers have maintained essential service in the past. Why shouldn't they do it this year?

"Slippage" Has Been Trivial

There has been concern in the industry over "slippage." This is the delay in putting new plant in operation when scheduled. But "slippage" so far has been trivial. At most it was only 100,000 kw for the first nine months of 1951. Next year it can and probably will be far more serious. There was a net increase of 5,815,960 kw in capacity from Jan. 1 to Oct. 1. Over 6 million kw actually was put into operation. At least another 1 million kw will be ready by the middle of December. As of Oct. 1 central station capacity was 74,316,806 kw. Add a million, and there will be 75.3 million kw of capacity available to carry a peak load estimated by the Edison Electric Institute at approximately 70 million kw.

The true picture is not quite so good but is satisfactory. We have been talking about capacity and not capability. This will be about 74.5 million kw. Interconnections will be used to a maximum to provide capacity. And in certain localities industrial plants can contribute to the public supply.

December Loads Should Be Handled Neatly

On the gloomy side is the possibility that equipment breaks will take many units off the line during the peak period. And there could be a drought that would reduce hydro output. These conditions are possible but not likely. So it looks as if the industry will get through December as neatly as it always has in the past.

December is also the industry's big month for another reason. Output during the week before Christmas is usually the highest of the year. Last year in the week ended Dec. 23 the industry had its first 7-billion kwhr week. This was a remarkable event because just 50 weeks before, that ended Jan. 14, the industry first produced 6 billion kwhr. During 1950 there were 19 weekly record highs. So far this year there have been only three. At most there can be only six more. And the top for the week ended Dec. 22 is not likely to be much above 7.5 billion kwhr. This increase of 500 million kwhr would be only half as great as the billion kwhr increase in 1950. But it still wouldn't make 1951 a bad year for the industry.

TECHNICAL NOTES

ARCHER E. KNOWLTON

Shunt capacitors out on the feeder not only raise the voltage for the last customer but also they avoid some of the boost at the first customer otherwise necessary.

Cobalt-platinum alloy makes a better magnet in small sizes than Alnico, has high coercive force, is ductile and readily machinable. Platinum content deters large-scale use.

Nylons produced by condensation polymerization have an affinity for water which renders them inept for general dielectric use but acceptable as sheathing.

Over-irrigation may injure soil by re-dissolving subsoil salts and bringing them to the surface for an alkali tendency.

Silt carried by Mississippi has been estimated at 326,000,000 tons annually, enough to provide a 240-ft deep cover over a square mile.

Silt carried by the Colorado River was estimated at 180 million tons annually before Hoover Dam was built; 137,000 acre-feet will be deposited each year in the 32,000,000 million acre-foot reservoir.

Silting in less than 40 years reduced the 90,000 acre-foot Macmillan reservoir (Pecos River, N.M.) to 42,000 acre-feet—less than half.

Tower corrosion is being thwarted in one instance by spraying the lower 5 or 6 feet of the legs with zinc and then with a vinyl coating.

Cooling water stringency prompted consideration of a gas turbine in a recent decision but the installation will await arrival of the gas pipeline.

Poles in USA pole lines are three-fourths Southern yellow pine.

Hard water can be reduced in pH by sulphuric acid addition to minimize incrustation of cooling towers but the acid tends to delignify the wood.

Southern yellow pine poles can be grown in the length of time it takes one to decay—if it has been preservatively treated.

Uninsulated flange joints are reported to assist in keeping bolts tight by reducing the temperature range that promotes creep.

Wallaba poles are very heavy but this ought not be a deterrent to their tryouts in coastal areas; so-called "greenheart" poles have been disappointing in Gulf Coast tryout.

NEWS ABOUT PEOPLE

San Diego G&E Appoints Sherwin President and Noble Vice President

E. D. SHERWIN

H. A. NOBLE

Emery D. Sherwin, vice president in charge of operations of San Diego (Calif.) Gas & Electric Co, has been elected president to succeed A. E. Holloway who is retiring after 41 years of service to the company. Harold A. Noble, general superintendent since 1947, replaces Sherwin as vice president of operations of the utility.

Sherwin, recently elected president of the Pacific Coast Electrical Association, has served San Diego G&E in many capacities since 1915. In 1932 he was appointed assistant general superintendent and was made general superintendent in 1941 and vice president in charge of operations three years later.

In World War I, Sherwin served in the Army Corps of Engineers and during World War II was a member of the War Manpower Commission.

Noble joined San Diego G&E in 1925 and has served as construction engineer, assistant superintendent, and later superintendent of electric production before becoming general superintendent in 1947.

Beginning with the utility in 1910 as a salesman, Holloway was concerned with extending service to rural areas. He was named commercial superintendent in 1921, vice president in charge of sales in 1932, and president in 1949.

•

H. D. Heiby, supervisor of Cincinnati Gas & Electric Co's tax section, has been elected assistant treasurer of the utility. He has been succeeded in his former position by **Claude E. York.** The company also promoted **J. E. Brinkman** from tax accountant to assistant supervisor in the tax section. Heiby became head of the tax department of Columbia Gas & Electric Corp in 1931 and transferred to Cincinnati G&E in 1946.

F. E. Gibson, district credit manager at Chicago for Graybar Electric Co, has been elected treasurer. He will make his headquarters in New York. Gibson joined Graybar in 1920 as a service and claims clerk at Seattle. He became credit manager there in 1932 and was transferred to Chicago in 1946.

Raymond D. Morrison, director of industrial sales for Central Maine Power Co, has been appointed director of the utility's newly established industrial development department.

J. C. Darby Is President of Utility Commissioners

(*See Front Cover*)

New president of the National Association of Railroad and Utilities Commissioners is J. C. Darby, member of the South Carolina Public Service Commission for 16 years. He succeeds George H. Flagg of Oregon.

Other officers elected at the organization's recent annual meeting at Charleston (EW Oct. 29, p 11) were Eugene S. Loughlin, Connecticut, first vice president, and C. L. Doherty, South Dakota, second vice president.

Darby, who currently is chairman of the South Carolina PSC, earlier in his career was employed by electric utilities and helped them convert from 40 to 60 cycles. In 1931-32 he represented Fairfield County in the South Carolina House of Representatives. The following year Darby was elected reading clerk of the legislative body and held that position until 1935. Also in that year he was named a member of the PSC.

Taking an active part in NARUC activities, Darby has served as first and second vice president of the organization.

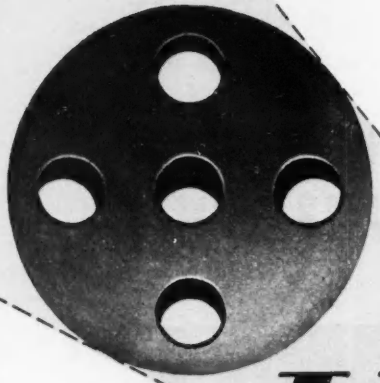
•

Charles P. Johnson, manager of the Western Publicity Division for Westinghouse Electric Corp for the past 11 years, has been transferred to New York as manager of the company's eastern publicity. He joined the company in 1939 and previously worked for newspapers in Denver and Pittsburgh.

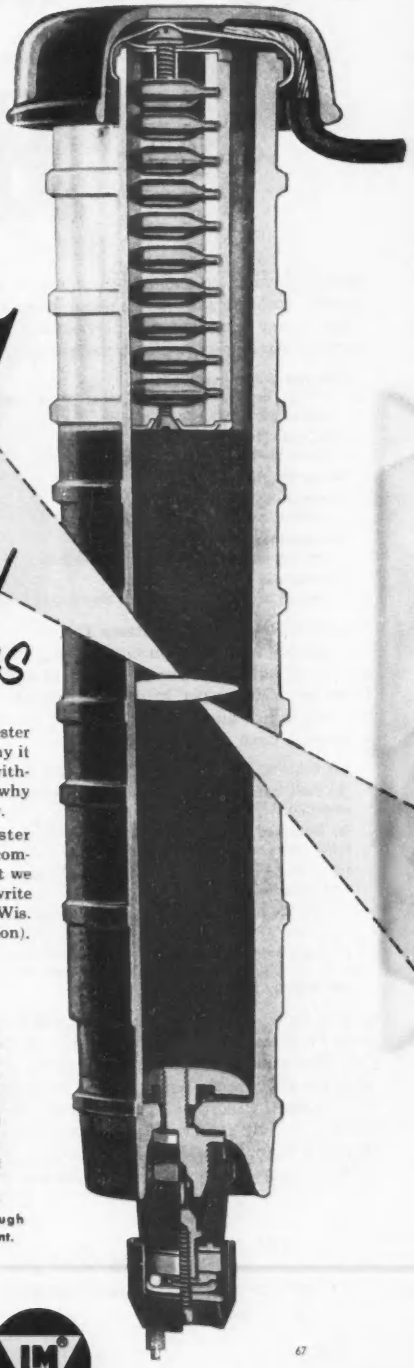
Don Lauckhart, formerly with Puget Sound Power & Light Co, has joined Grays Harbor PUD, Aberdeen, Wash., as electrical engineer.

F. C. Ludington, manager of Allis-Chalmers Manufacturing Co's control section since 1946, has been named manager of the company's Hawley Works in West Allis. He will direct the sales, engineering, and manufac-

(*Continued on page* 27)



the only lightning arrester with the LENS that gives it such high discharge capacity and unchanging characteristics



An ingeniously designed lens electrode is placed in the valve element of *every* L-M valve type arrester. This exclusive L-M feature performs an extremely valuable function that accounts for the exceptional performance and long life of L-M arresters.

Here's why. Lightning surge current tends to "skin" down the outside of the valve element, just as 60-cycle current will flow on the skin of a conductor. This results in only a small portion of the valve element being used to handle lightning surges. Thus the surge capacity of what might be a good arrester is materially lowered—the valve element will fail in time due to the excessive concentration of current on the outer skin.

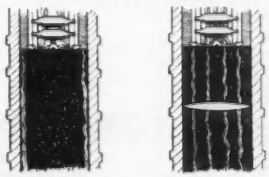
The L-M lens electrode completely counteracts lightning surge current "skin effect." The full cross-section of the valve element is available for extremely high surges—considerably in excess of 65,000 amperes.

The lens does the job. It distributes the surge evenly throughout the valve element—doesn't allow it to concentrate in any one path and thus clinker the element.

That's one reason why an L-M arrester can take more and heavier surges—why it maintains its high discharge capacity without change, for years and years . . . why its rate of failure is so gratifyingly low.

Get the whole story on L-M arrester performance, including some utility company records which substantiate what we say. Ask the L-M Field Engineer, or write Line Material Co., Milwaukee 1, Wis. (a McGraw Electric Company Division).

Here's What Happens



Without LENS
Surge channels down sides of element.

With LENS
Surge goes through the entire element.

LINE MATERIAL
Lightning Arresters

Complete Coordinated Equipment for Distribution Today

67

a Small steam unit for Big power stations

Here is a small steam generating unit that is ideally suited to the special requirements of large steam power plants, particularly new stations. Among its applications are these...

For space heating needs
during construction and in some cases in completed plants

For steam to evaporators
initial starting-up or supplementary make-up

For preheating oil

For standby plants
heating and service to auxiliaries

For outdoor plants
heating and various special requirements

For various other applications
such as heating water for acid cleaning of boilers

The C-E Re-circulation Steam Generator is an exceptionally compact, efficient, fully-automatic unit capable of providing up to 6000 lb of steam per hr at pressures up to 300 psi. It has numerous advantages among which the most important are:

(a) Requires a space only 7 ft. x 7 ft. by 7 ft. high

(b) Fully automatic-push-button control — minimum attention

(c) Delivered fully assembled; requires no special foundation; only a simple vent instead of a chimney

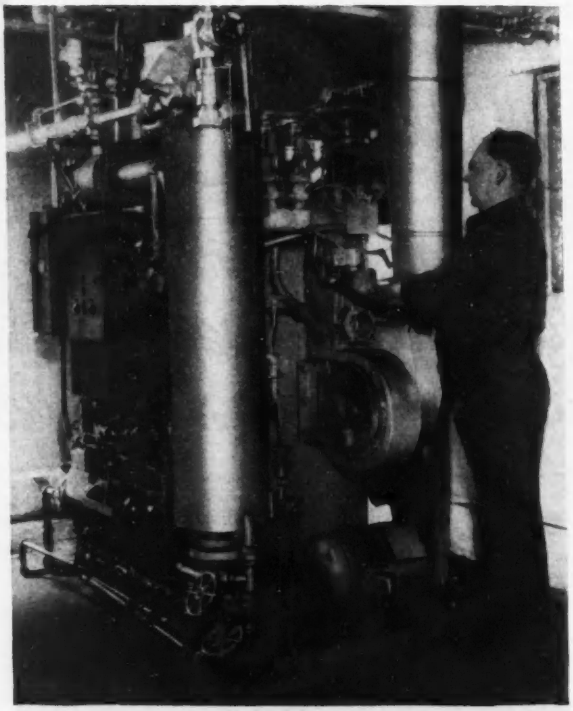
(d) Can be brought from "cold" to full capacity and pressure in a matter of minutes

(e) Can be operated continuously or intermittently, at full capacity or at low load, as desired

(f) Easily moved from one location to another; no need for long, expensive pipe lines to meet temporary demands for steam

If you have any one or a combination of these requirements — your best bet is the C-E Re-circulation Steam Generator. It's more than a package boiler — it's a complete steam plant including all controls and auxiliaries — a fully integrated unit. Investigate this unit before you buy any boiler in its capacity range as an auxiliary steam source.

B-536



C-E

COMBUSTION ENGINEERING—
SUPERHEATER, INC.

200 Madison Ave. • New York 16, N. Y.

ALL TYPES OF BOILERS, FURNACES, PULVERIZED FUEL SYSTEMS AND STOKERS; ALSO SUPERHEATERS, ECONOMIZERS AND AIR HEATERS

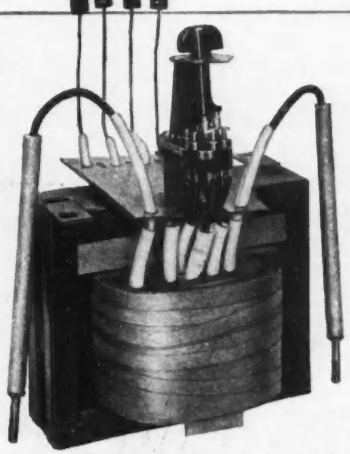
15% Smaller

IN SIZE AND WEIGHT
WITH SAVINGS IN OPERATING COSTS

YOU CAN GET higher flux carrying capacity and lower hysteresis losses with the new *Curvacore* distribution transformer. The new transformer with its redesigned core and other improvements gives better performance though reduced in size and weight 15%.

The core of the *Curvacore* transformer utilizes strips of cold rolled steel, shaped to follow the natural path of the magnetic flux. Steel strips are wound, shaped, annealed and cut into two-turn lengths. Each length is fed through the coil structure and then resumes its original curved shape.

The *Curvacore* transformer can yield real savings in operating costs over the years. Here are the advantages of the new design:



New internally operated tap changer has handle and position indicating dial plate above the oil level.

FORMER FEATURES RETAINED

Where tank wall high voltage bushings are specified, Curvacore transformers retain the simplified angle bushings with handy chuck-type connector.

The Curvacore transformer tank is *Spra-Bonderized* and then a 3-coat baked-on finish of alkyd-resinous paint is added.

The Curvacore transformer is constructed with the same high quality craftsmanship. Each transformer is thoroughly tested electrically and mechanically.

1 EXCITING CURRENT REDUCED BY ONE-HALF
Wound core design provides a more efficient path for the magnetic flux.

2 BETTER RATIO OF COPPER-IRON LOSSES
New core design gives better balanced arrangement of core steel to copper.

3 REGULATION IMPROVED UP TO 15%
Low reactance of design results in lower impedance.

4 THERMAL CAPACITY IMPROVED
Increased cooling area within the windings reduces the copper-to-oil temperature gradient. Improved cooling results in added years of service life.

5 SIZE AND WEIGHT REDUCED BY 15%
The reduction in size and weight makes the *Curvacore* transformer easier and cheaper to handle and to install.

Curvacore TRANSFORMERS

Economies resulting from these features mean all-around savings for your system and make the *Curvacore* transformer a good investment.

The *Curvacore* transformer is now available in ratings of 25 kva and lower. Higher ratings will soon be available.

For more information on the new *Curvacore* distribution transformer, call your local A-C sales office or dealer. Or write Allis-Chalmers, Milwaukee 1, Wis. A-3418

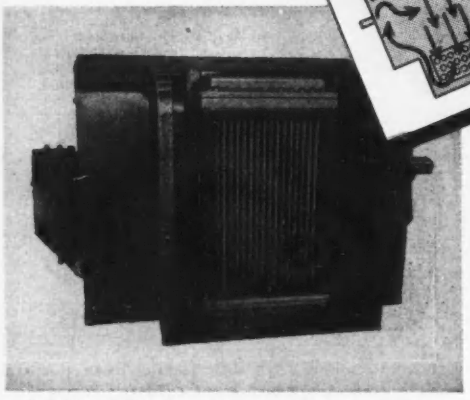
Curvacore is an Allis-Chalmers trademark.

ALLIS-CHALMERS

A-C ALLIS-CHALMERS

IT'S COOL, TOO — IT'S QUIET!

WATER COOLED



The Elliott TEWC motor, with cover removed from the heat exchanger unit. These cool, water tubes take the heat from the fan-driven air which circulates around them and back to the motor. (Note plan view above.) This motor drives a boiler-feed pump.

Here is a fine example of the adaptability of Elliott Fabri-Steel construction to the requirements of individual motor design. Note the simple, clean lines of this 2000-hp two-pole induction motor, ideally fitted for operation where dirty atmosphere required totally-enclosed design, and surroundings demanded the quiet of totally-enclosed water cooling.

With Fabri-Steel construction Elliott engineers found no difficulty in placing the heat exchanger tube bank just where it should be for most efficient cooling, at the same time achieving pleasing lines in outward design.

L-813

ELLIOTT COMPANY

News About People

(*Continued from page* 22)

turing of control apparatus and the manufacture of switchgear and other products produced at the Hawley Works. Ludington joined Allis-Chalmers in 1923.

John F. Carroll has been appointed manager of product planning by Hotpoint, Inc. He has been coordinator dealing with the National Production Authority for the company.

Russell Crownover has been appointed Abilene manager for West Texas Utilities Co. He has been with the utility for 14 years.

Guy T. Shoemaker, vice president in charge of construction for Kansas City (Mo.) Power & Light Co, has retired. Beginning his career in the electrical field with United Light & Power Engineering & Construction Co, later known as United Light & Power Service Co, in 1913 as chief draftsman. Shoemaker subsequently served as chief engineer and vice president. He became president of the firm in 1938 and in the same year was appointed general manager of United Light & Power Co, the parent company. Shoemaker first came to Kansas City P&L as vice president in 1935 and remained until 1938. He returned to the Kansas company in 1940 as vice president in charge of power production.

Walter Brenton and **Howard Arnett** have been appointed assistant general superintendents of Portland General Electric Co. Brenton, who has been superintendent of production and will retain power production duties, will become general superintendent when **J. C. Henkle** retires. Arnett's former position of purchasing agent has been taken over by **Fred G. Hodge,** former general division manager of PGE who has returned to the company's service. Brenton joined PGE in 1924 and Arnett in 1936.

William H. Sisson, industrial manager at Indianapolis for Minneapolis-Honeywell Regulator Co, has been named power industry manager. He will make his office in Philadelphia. **George M. Rossiter** will take over Sisson's post at Indianapolis.

Rome Cable Corp Makes Marks Sales Manager

Rome (N. Y.) Cable Corp has appointed Frederick S. Marks sales manager. He has been assistant sales manager.

Associated with the wire and cable

F. S. MARKS

industry for 25 years, Marks joined Rome Cable Corp in 1945 as Southern sales representative. In 1949 he came to Rome as sales promotion manager for the company.

•

Leonard A. Duckworth, eastern division sales manager for New York State Electric & Gas Corp since 1947, has been named manager of residential and commercial sales for the utility on a state-wide basis. He will make his headquarters at Binghamton. Duckworth joined the company in 1928 and also has served as assistant superintendent of the distribution department and then appliance sales supervisor at Brewster.

Earl C. Rohrbaugh, formerly district manager for Iowa-Nebraska Light & Power Co, has been named production manger for Western Light & Telephone Co, Inc, Kansas City, Kan. He will have charge of the construction of the utility's new electric generating station near Great Bend, Kan. When the station is completed, Rohrbaugh will supervise the integration of all electric generating stations in the utility's system.

Edward H. Coe, chairman of the executive committee of the board of Central Arizona Light & Power Co and president of the utility from 1936 to 1946, has retired. Coe joined Central Arizona in 1925 as vice president and general manager. Earlier he worked for Public Service Co of Colorado, Niagara, Lockport & Ontrio Power Co, and General Electric Co.

Roger E. Gay, president of Bristol Brass Corp, has been elected president of the American Standards Association. **Edward T. Gushee,** vice president of Detroit Edison Co, was named vice president.

John W. Vonderheide has been named manager of plant engineering for General Electric Co's plant being constructed at Buechel, Ky.

T. Y. Henry has been appointed division manager of Copperweld Steel Co's new subsidiary, Flexo Wire Co, Oswego, N. Y. Before joining Copperweld Henry was manager of the materials section, division standardizing, of the Victor Division of Radio Corporation of America.

Walter J. Seeley, chairman of the department of electrical engineering at Duke University, Durham, N. C., has been appointed director of research and development for the College of Engineering. He also has been named chairman of the student development committee of the Engineers' Council for Professional Development.

Harold A. Petit, assistant treasurer of South Carolina Electric & Gas Co, has been elected president of the National Exchange Club.

Embry Ferguson, chief clerk in Texas Power & Light Co's office at Corsicana, Tex., has been appointed assistant manager of the utility's district there. He has been with the company 18 years.

L. F. A. Mitchell has been named division product sales manager by General Cable Corp. His headquarters will be in New York City.

OBITUARY

Charles Z. Yost, 62, assistant manager of the electrical operating office of Pacific Gas & Electric Co, died Oct. 20 at Berkeley, Calif.

MANUFACTURERS and MARKETS

HIGH-BAY LIGHTING is analyzed by two Westinghouse Electric Corp lighting application experts during "Lighting-At-Work" show which is being presented by the company in major cities this fall and early next year. The show is designed to provide more and better information to engineers who specify lighting equipment

3 Electric Firms Report Record 9-Month Sales

Three of the nation's large electrical manufacturing companies reported record sales for the first nine months of 1951. Of the three, Westinghouse Electric Corp and Allis-Chalmers Manufacturing Co announced that higher taxes had caused net income to fall below the level for the same period in 1950. Net income of Sylvania Electric Products, Inc, however, was the highest in the company's history.

General Electric Co earlier reported increased sales during the same period, but lower profits due to higher taxes (EW, Oct. 29, p 28).

Westinghouse sales for nine-month period soared to $901,042,000, an increase of 23% over 1950. Income before taxes for the three quarters of 1951 was $119,579,000 compared with $86,964,000 in 1950. But net income after taxes amounted to $42,757,000, equal to $2.67 per common share, a decline of 12.9% from the $49,079,000, or $3.37 per common share, for the first three quarters of last year. The company's tax bill jumped from $37,885,000 for the nine-months period in 1950 to $76,822,000 for the same period this year, an increase of 102.9%.

Net sales billed by Allis-Chalmers in the nine months of 1951 were $43,346,804, an increase of 36% over 1950. The firm, however, had to lay aside $27,650,000 for federal income and excess profits taxes, an increase of 95% over 1950. The higher taxes cut into net income causing it to drop from $17,613,821, equal to $6.65 per common share, for the first nine months of 1950 to $15,696,804, equal to $5.85 a share, in 1951. Earnings before taxes increased 36% from $31,763,821 in 1950 to $43,346,804 in 1951.

Unlike the other big electrical manufacturing firms, Sylvania's net income rose 20% in the first nine months of the year despite a 60% increase in taxes. Net sales totaled $144,202,340, up 36% over last years' $105,778,320. Net income for the nine-months period amounted to $6,169,504, equal to $3.16 a common share, compared with $5,129,080, or $3.31 a share for 1950. The number of shares outstanding at the end of nine months of 1951 was 400,000 greater than in 1950.

•

Alcoa, GSA Sign Pact on Rockdale Plant Output

Aluminum Co of America and the U. S. General Services Administration have signed a contract giving the government first call for five years on the aluminum output of Alcoa's smelting plant under construction at Rockdale, Tex. Under the agreement, when month-to-month government requirements fall below two-thirds of the output of the plant, the remaining aluminum up to the two-thirds total will be made available to other users in the form of pig or ingot during the five-year period.

At the end of the five-year term, such pig and ingot customers will continue to have first call on 25% of Alcoa's Rockdale production for an additional 15 years. The remaining aluminum produced at the new plant will be made available to the market in the form of semi-fabricated and fabricated products.

Similar agreements were reached by Alcoa and GSA concerning output at Alcoa's facilities at Wenatchee, Wash., and Point Comfort, Tex.

•

Universal Appliances Sold

Landers, Frary & Clark, New Britain, Conn., has sold its "Universal" electric range, washing machine, and water heater business to a new corporation, Universal Major Appliances, Inc. The new firm was formed by Artkraft Manufacturing Corp, Lima, Ohio, and associated companies. Landers intends to devote its future activities to vacuum cleaners, small electric appliances, and hardware lines.

GE Division Is Moving

General Electric Co's major appliance division has officially established headquarters at Louisville, Ky. Formerly located at Bridgeport, Conn., the division has its principal offices and mailing address at the Chamber of Commerce Building, 310 West Liberty Street, until an administration building is constructed at Appliance Park in nearby Buechel. Staffs of some of the departments in the division have moved to Louisville and others will gradually set up operations there.

•

Brass Operations Cut

Shortages of copper, zinc, and scrap metals has forced Chase Brass & Copper Co to cut operations to 60% of capacity.

The continued scarcity of the metals has necessitated a reduction in the work week of from five to four days at the company's Waterbury plants. Some layoffs are anticipated at the Cleveland plants, now operating on a five-day week basis.

MANUFACTURING BRIEFS

Westinghouse Electric Corp is sponsoring a one-day conference Nov. 28 at Chicago to enable electric power suppliers to exchange ideas and to discover new means of participating in the 4-H Farm and Home Electric Program. A highlight of the conference will be a luncheon address by Charles E. Kohlhepp, president of Wisconsin Public Service Corp.

A British Firm, English Electric Co, Stafford, England, has been awarded a contract to supply three 42,220-kva generators and appurtenances for Lookout Point Dam power house on the Willamette River in Oregon. English Electric underbid three American companies to win the contract.

Metal Prices
Nov. 5, 1951

COPPER, Conn., V., lb	$ .24½
LEAD, N. Y., lb	.19
ZINC, prime Western, E. St. Louis, lb	.19½
TIN, Straits, qaul. N. Y., lb	1.03
ALUMINUM, ingot, base price	.19
NICKEL, base price	.56½
STEEL, billets, Pitts., ton	56.00
STEEL, scrap, No. 1 heavy, Pitts., ton	45.00

NEW ELECTRICAL CONSTRUCTION

A weekly selection of U. S. electrical construction projects announced by private and government utility systems involving more than $70,000. Also listed are major industrial and construction jobs where electrical work is indicated or implied

UTILITIES

Proposed Construction

Ark., Bauxite—Reynolds Metal Co., Bauxite, expand plant, $75,000,000.

Ill., Lockport—The Texas Co., Chrysler Bldg., New York, 17, N. Y., petroleum refinery, $45,000,000.

Ind., East Chicago—Youngstown Sheet & Tube Co., Stambaugh Bldg., Youngstown, O., 56 ft. cold strip mill and heating furnace, $40,000,000.

Md., Bethesda—Dist. Pub. Wks. Office, Potomac River Naval Command, Naval Gun Factory, Wash., D. C., replacement 100 kva transformer in bsmnt. of bldg. 122 with 200 kva transformer, NOY 28113, Spec. 29794. Plans deposit $10.

Mich., Flint—City, Harold M. Kinder, mgr., feeder mains, $1,600,000; elevated tanks, $350,000; electrification of water plant, $350,000; diesel standby power plant, $300,000, Lewis Norris & May, 300 Wolverine Bldg., Ann Arbor, consult. engrs.

Miss., Greenville—City, electric power and lighting sys. for Greenville Mills plant under construction, Plans deposit $40, Mallett & Assoc., 416½ E. Amite St., Jackson, engrs.

Miss., Yazoo City—City, power plant addn. $1,700,000. Burns & McDonnell Eng. Co., 95 and Troost Sts., Kansas City, Mo., consult. engrs.

N. H., Portsmouth—First Naval Dist., 495 Summer St., Boston, Mass., plans by Anderson & Beckwith, 11 Beacon St., Boston, Mass., electric test laboratory, Naval Shipyard, $2,079,000.

N. Y., New York—Bd. Water Supply, 120 Wall St., Zone 5, Contr. 414, furnishing, testing, del. two 150 kva. indoor unit sub-stations and two 45-kva. indoor and three 15 kva. outdoor transformers for the Neversink and East Delaware Intake Chambers and the Downsville Release Water Chamber of the Delaware Aqueduct.

Tenn., Memphis—Memphis Light, Gas & Water Co., 179 Madison Ave., Millington Road Electric Sub-station. Walk C. Jones, 1215 Poplar St., Memphis, archt.

Texas—Rita Blanca Electric Co-operative, Dalhart, Tex., sys. imprvs. and addnl. distr. lines, Dalhart.

Texas—Farmers Electric Co-operative, Greenville, sys. imprvs. and completion previously authorized work, Hunt Co. $125,000.

Texas—Service Pipe Line Co., Ranger, base radio stations at Ranger, Albany and Woodson, $90,000 each.

Tex., Port Arthur—Pure Oil Co., 35 E. Wacker Dr., Chicago, Ill., steam lines and services, $100,000; electric (outside) lighting sys extens. and services, $90,000; gas lines, $65,000.

Tex., San Antonio—State of Texas, Bd. for Hospitals & Special Schools, 45 and Lamar Sts., Austin, power plant, $150,000, CD 10/8; 400-patient tuberculosis hospital, $1,500,000. Plans deposit $50. Atlee B & Robert M. Ayres, Transit Tower Bldg., archts.

Alaska, Ketchikan—City, City Hall, voted bonds, exten. power system, $1,000,000.

Low Bidders & Contracts Awarded

Kansas—Kerns-Ramey Constr. Co., P.O. Box 6, Amarillo, Tex. CA $97,374, 75 mi. rural distr. lines, Wilson Co. Radiant Electric Co-operative, Fredonia, Kan. Bids Oct. 15.

N. Y., Newburgh—Burns & Roe, 233 Broadway, New York, N. Y., CA. Approx. $11,000,000. design and construct, 2nd unit 60,000 kw. generator at Danskammer Point Steam Station, 6 mi. north of here. Central Hudson Gas & Electric Corp., South Ave., Poughkeepsie, N. Y.

Pa., New Cumberland—Hughes-Foulkrod Co., 1505 Race St., Phila., Pa., CA. $523,347. boiler plant, site imprvs. at General Depot, Inv. 52-7, U. S. Eng., 24 St. and Maryland Ave., Baltimore, Md., Bids Oct. 12.

Pa., Towanda—Chemung Valley Corp., Sayre, Pa., CA. $750,000. Mfg. plant. Sylvania Electric Products, Inc., 121 Loring Ave., Salem, Mas. Clarence Wagner, 475 William St., Williamsport, Pa., archt.

Pa., Tobyhanna—Corbetta Constr. Co., Inc., 220 E. 42 St., New York, N. Y. LB. $6,767,600. Schedule A, Refrigerated storage; Lipsett, Inc., 100 Park Ave., New York, N. Y., LB. $1,181,600, Schedule C, foundations for various bldgs., Dpt. Army, 121 N. Broad St., Phila., Pa. Gilboy & O'Malley & Stopper, Inc., Liberty Trust Bldg., Phila., Pa., engrs. and archts.

Texas—J. O. Lawton & Sons, Lubbock, Tex., CA. $119,000. rural distr. lines, sys. imprvs., 2-way radio, Dallam Co. Rita Blanca Electric Co-operative, Dalhart, Tex.

Tenn., Nashville—Nashville Electric Service, 605 Church St., Nashville, Tenn., Owner Builds. $63,000. electric sub-stations, Lynwood Blvd. and Glencliff Rd.

INDUSTRIAL, COMMERCIAL & PUBLIC BUILDINGS

Proposed Construction

D. C., Wash.—U. S. Eng., First and Douglas St. N.W., Zone 25, Army Security Center. $5,000,000. Wigton-Abbott Corp., 1225 South Ave., Plainfield, N. J., engrs. (Location not selected).

Ga., Augusta—City and Richmond Co., City Hall, city-county office bldg., $3,000,000.

Me., Limestone—U. S. Eng., 857 Commonwealth Ave., Boston, plans by Alonzo J. Harriman, Inc., 292 Court St., Auburn, addnl. buildings, utilities, hangars, family housing units, laundry, chapel, etc. Limestone Air Force Base, $16,000,000; plans by John Howard & John Calvin Stevens, 187 Middle St., Portland, gymnasium at airfield, Limestone Air Force Base, $200,000.

Mass., Waltham—State, Dpt. Mental Health, 15 Ashburton Pl., Boston, plans by Gordon Robb, 551 Boylston St., Boston, hospital for psychotic children, Proj. M-201. $1,000,000. Thompson & Lichtner, Inc., Brookline, struct. engrs. Leo J. Crowley, 1250 Tremont St., Teston, htg. and vent. engr., Massachusetts Electrical Constr. Co., Inc., 25 Irvington St., Boston, elect. engr.

Mich., Detroit—State, A. N. Langius, dir. State Bldg. Dpt. Lansing, plans by O'Dell, Hewlett & Luckenbach, 2300 Dime Bldg., brick, steel, concrete Children's Hospital. $2,000,000.

Mo., St. Louis—City, c/o Director Perry T. Rathbone, City Art Museum, Forest Park, new wing to present art museum, Est. $1,500,000; 600 seat auditorium for Art Museum, $450,000-$540,000.

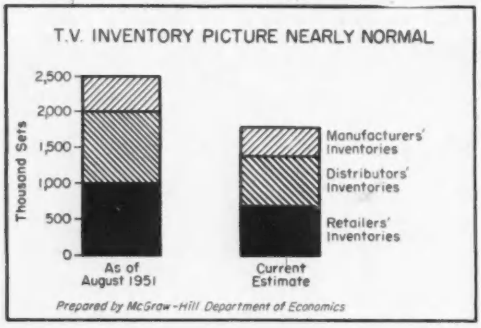
Low Bidders & Contracts Awarded

Ill., Rockford—Security Bldg., Co., 717 E. Jefferson St., Rockford, Ill., CA. $3,000,000, 5 story hospital. Rockford Memorial Hospital Assoc., 105 Douglas St., Rockford, Ill. Bids Aug. 8.

N. Y., Jericho—Turner Constr. Co., 420 Lexington Ave., New York 17, N. Y., CA. Approx. $3,000,000. plant to mfg. aerial cameras, radio direction finders, etc. at 4½ acre site on Northern State Parkway. Fairchild Camera & Instrument Corp., 88-06 Van Wyck Expressway, Jamaica, N. Y., Kahn & Jacobs, 2 Park Ave., New York 16, N. Y., archts.

West Va., Institute—Ford, Bacon & Davis, 39 Broadway, New York 6, N. Y., CA. $11,000,000 design and construct Coal Hydrogenation plant, Union Carbide & Carbon Corp., 30 E. 42 St., New York, N. Y.

Electrical Business Outlook



END OF SLUMP in television set sales has brought inventories down to less than half the level reached last summer

It All Adds Up to More Load

The inventory recession in the electric appliance business is over. Checkups made by trade associations, government agencies, and independent business services all tell the same story: Inventories are down.

The biggest decline is in stocks of television sets. Retail dealers now have only about 600,000 to 800,000 sets on hand. Retail sales are running about 500,000 sets a month. And even if this is a seasonal spurt, normal consumer demand is running at least 400,000 sets a month.

So appliance stores now have an average of 30 to 60 days' supply of TV sets. And that's just about the normal merchandising practice. Wholesale distributors have about as many sets in stock as retailers.

Appliance Inventories Down

The real cut has been in manufacturers' TV inventories. They're down to less than half the level reached this summer—from 768,766 sets on Aug. 3 to about 375,000 sets now. Altogether, there are probably about 1.8 million sets now held by manufacturers, distributors, and retailers—less than four months total supply at the current rate of retail sales.

This has encouraged manufacturers to resume production on both television sets and radio sets, stocks of which have also been sharply reduced. In September, radio production almost doubled. TV output increased 130% from the low August levels. And preliminary reports indicate the improved production rate was held during October.

These lines can't continue to show production gains, of course. Material shortages put a ceiling on output. Right now the radio-TV producers are using up inventories of parts they accumulated during the summer, when rising inventories kept output below permissible levels.

But you can get some idea of how many sets will be going into homes. There'll be about 500,000 per month for perhaps three months, while inventories still can be drawn down. After that, it's a matter of how much new production is allowed. In the first six months of 1952, TV set production may be held to a total of two million units. And that's pretty much the ceiling on sales.

The situation is similar in refrigerators and other appliance lines. There are now about one million refrigerators in inventory in this country. That's about a three months' supply. And the stocks may be well worked off by the first quarter of 1952. Then new production will be held to 900,000 units a quarter—or about 1.8 million for the half year.

Industrial Production Steady

Industrial output generally has been holding about even since August. The Federal Reserve Board's index then was 218 (1935-39=100), and the October estimate is about 219.

Production of machinery and defense items, as well as consumer durables, is up. But soft goods output has slackened, particularly the textile and paper lines.

Production in the major power-consuming industries has done a little better than the average and has continued to edge up. Output of chemicals, petroleum, and coal products is close to capacity and holding even. Paper is off. And so is smelting and refining activity in the nonferrous metals industry. But steel output is up sharply, as is fabricating activity in both steel and nonferrous metals.

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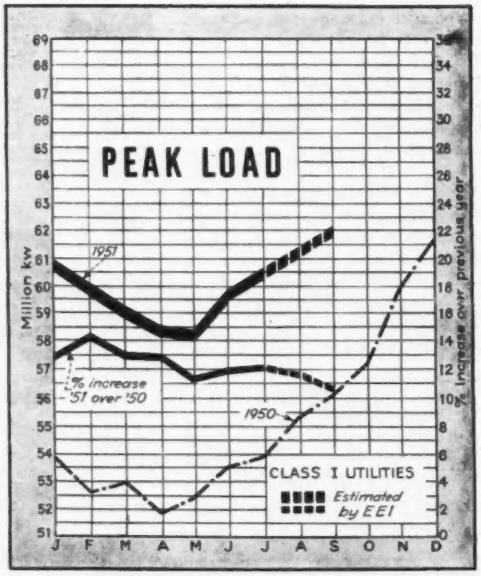

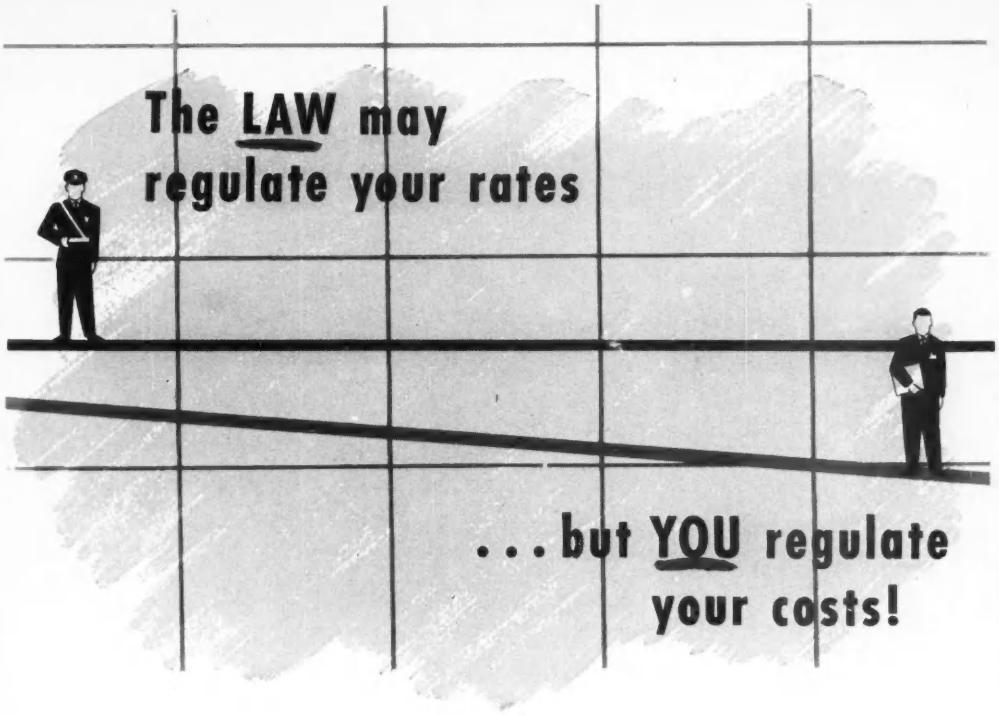

MANY utilities today are operating at rates established when maintenance and equipment costs were much lower. As a result, greater emphasis is now being placed on the efficiency of transmission equipment in order to keep operating costs down.

Moloney Transformers, from the largest power transformers down to the smallest distribution transformers, are today proving their claim of efficient, dependable, economical operation. We believe, and many utilities agree, that you can't buy better transformers. Investigate and find out for yourself what we mean by dependable, economical, long operating life. ME51-19

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Manufacturers of Power Transformers • Distribution Transformers • Load Ratio Control Transformers • Step Voltage Regulators • Unit Substations

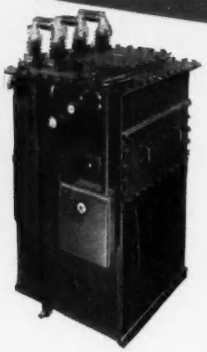
SALES OFFICES IN ALL PRINCIPAL CITIES • FACTORIES AT ST. LOUIS, MO. AND TORONTO, ONT., CANADA

These Same BIG FEATURES on Large or Small Units

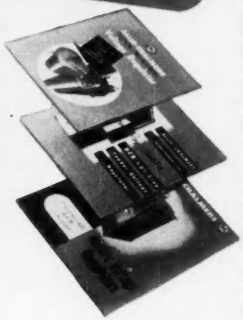
ALLIS-CHALMERS 5/8% Step Regulators

JFR — Single phase regulator, 11.4 kva, 7620 v, 15 amp.

DFR — Single phase regulator, to 250 kva, 6900 v.



AFR — Three phase regulator, sizes through 2500 kva, 69 kv.



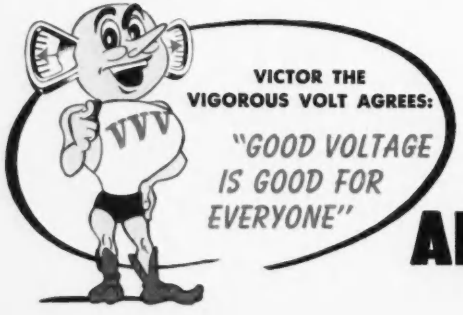
GET THESE BOOKLETS
JFR — 01B6424
DFR — 01B6065A
AFR — 01B6056C

WHETHER YOU NEED an 11.4 kva regulator on a small feeder — or the biggest 2500 kva three phase unit, the entire Allis-Chalmers regulator line provides these same quality features:

- ✓ 5/8% steps.
- ✓ Close regulation (± 1 volt band).
- ✓ Easy adjustment. The same type of control used on all sizes.
- ✓ Close average voltage for all types of load maintained by voltage integrator.
- ✓ Long life contacts of liberal design to withstand hundreds of thousands of operations.
- ✓ Tap changing and drive mechanism with balanced spring action to eliminate shock . . . operates under oil for long trouble-free life.
- ✓ Unit construction to simplify maintenance.

IN ADDITION, 5/8% step regulators require only 1/3 the exciting current of older types of regulators. Low exciting current releases system capacity for useful loads.

Get the complete facts on Allis-Chalmers 5/8% step regulators from your nearby Allis-Chalmers district office, or write Allis-Chalmers, Milwaukee 1, Wisconsin. A-3465



ALLIS-CHALMERS

Originators of 5/8% Step Regulation